



STIC Search Report

Biotech-Chem Library

STIC Database Tracking Number: 167553

TO: Patricia Duffy
Location: rem/3B05/3C18
Art Unit: 1645
Thursday, June 30, 2005

Case Serial Number: 10/033243

From: Noble Jarrell
Location: Biotech-Chem Library
Rem 1B71
Phone: 272-2556

Noble.jarrell@uspto.gov

Search Notes

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STIC-Biotech/ChemLib

157 553

me

From: Chan, Christina
Sent: Monday, June 27, 2005 10:15 AM
To: Duffy, Patricia; STIC-Biotech/ChemLib
Subject: RE: Sequence search please rush.. amendment due

Please rush. Thanks Chris

Chris Chan

TC 1600 New Hire Training Coordinator and SPE 1644
(571)-272-0841
Remsen, 3E89

RECEIVED
JUN 27 2005
(STIC)

-----Original Message-----

From: Duffy, Patricia
Sent: Sunday, June 26, 2005 10:48 AM
To: Chan, Christina
Subject: Sequence search please rush.. amendment due
Importance: High

Dear Christina.

Please rush amendment overdue.

Dear Stic,

IN re: 10/033,243

Please search SEQ ID NOS:62 and 77. These are short NA.
I need a commercial and interference database search.
Please print out to 100 hits in each category.

Thank you,

Patricia A. Duffy, Ph.D.
Art Unit 1645
Remsen 3B05; Mailbox 3C18
571-272-0855

STAFF USE ONLY

Searcher: rolle
Searcher Phone: 2-
Date Searcher Picked up: 6/30/05
Date Completed: 3
Searcher Prep/Rev. Time: 3
Online Time: 3

Type of Search

NA#: 2 AA#: AA
Interference: AA SPDI: AA
S/L: AA Oligomer: AA
Encode/Transl: AA
Structure#: AA Text: AA
Inventor: AA Litigation: AA

Vendors and cost where applicable

STN: AA
DIALOG: AA
QUESTEL/ORBIT: AA
LEXIS/NEXIS: AA
SEQUENCE SYSTEM: AA
WWW/Internet: AA
Other(Specify): AA

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GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.

OM nucleic - nucleic search, using sw model

Run on: June 29, 2005, 20:23:08 ; Search time 1720 Seconds
(without alignments)
221.304 Million cell updates/sec

Title: US-10-033-243-62

Perfect score: 10

Sequence: 1 ndancgkctcg 10

Scoring table: IDENTITY NUC

Gapop 10.0 , Gapext 1.0

Searched: 34239544 seqs, 19032134700 residues

Total number of hits satisfying chosen parameters: 68479088

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 100 summaries

Database :

EST: *
1: gb_est1: *
2: gb_est2: *
3: gb_hic: *
4: gb_est3: *
5: gb_est4: *
6: gb_est5: *
7: gb_est6: *
8: gb_gss1: *
9: gb_gss2: *

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	6.8	68.0	14	9	CL423499
2	6.8	68.0	17	9	AJ589126 Arabidops
3	6.8	68.0	20	1	AL043208 DXFZP434H
4	6.8	68.0	21	8	AZ863356 2M0171N17
5	6.8	68.0	22	6	CAB51061 D09F11_K1
6	6.8	68.0	22	9	AJ593585 Arabidops
7	6.8	68.0	23	9	TA266D03P
8	6.8	68.0	24	7	CO784722 BL281C_A0
9	6.8	68.0	25	8	AZ877656 BQ00754-3
10	6.8	68.0	28	1	AA717506
11	6.8	68.0	28	7	CF328209 NACL--03-
12	6.8	68.0	28	9	DMES45945
13	6.8	68.0	29	7	CO789974 NT008B_G0
14	6.8	68.0	29	8	BZ291261 SALK_1200
15	6.8	68.0	33	4	BG173250 602336739
16	6.8	68.0	33	8	BZ383745 SALK_1343
17	6.8	68.0	34	1	AU258533 AU258533
18	6.8	68.0	34	8	BZ379444 SALK_1133
19	6.8	68.0	37	2	BF784959 602110922
20	6.8	68.0	37	4	B1658475 60328093
21	6.8	68.0	38	8	AQ025003 EP(2)0966
22	6.8	68.0	38	9	TA335E03Q
23	6.8	68.0	38	9	CL682259 PRI0133C
24	6.8	68.0	40	4	B1658553 603283781

25	6.8	68.0	40	9	AJ598365
26	6.8	68.0	40	9	BX660365 Arabidops
27	6.8	68.0	40	9	CL523373 DAL2H04 F
28	6.8	68.0	41	1	AJ746715
29	6.8	68.0	41	8	BH849732 SALK_0702
30	6.8	68.0	41	9	CL518209 SAE4B10 F
31	6.8	68.0	41	9	CL705789 EY04457-5
32	6.8	68.0	42	7	CO788022 NT003A_C0
33	6.8	68.0	43	2	BF114596 SMOVAFCAP
34	6.8	68.0	43	4	B1830843 603080959
35	6.8	68.0	43	9	AL949027 Arabidops
36	6.8	68.0	44	6	CD746851 SL2 D08 S
37	6.8	68.0	44	8	BH862329 SALK_0833
38	6.8	68.0	44	8	BZ384007 SALK_1349
39	6.8	68.0	44	8	BZ763112 SALK_1134
40	6.8	68.0	44	9	BX001971 Arabidops
41	6.8	68.0	44	9	AJ622569 Drosophil
42	6.8	68.0	44	9	CC883620 SALK_0953
43	6.8	68.0	45	8	BZ384047 SALK_1349
44	6.8	68.0	46	7	CF304811 ABF1--06-
45	6.8	68.0	46	7	CF304811 ABF1--06-
46	6.8	68.0	46	8	BZ383801 SALK_1345
47	6.8	68.0	46	9	AG216853 Drosophil
48	6.8	68.0	46	9	DMES46285
49	6.8	68.0	47	2	BE534847
50	6.8	68.0	47	8	AZ615286 1M0444106
51	6.8	68.0	47	8	BH865116 SALK_0974
52	6.8	68.0	47	8	BZ665531 EY00954-3
53	6.8	68.0	47	9	CG773973 1123015F0
54	6.8	68.0	48	8	BZ582213 3590_1_35
55	6.8	68.0	48	8	CC060177 EY02776-3
56	6.8	68.0	48	9	AG197101 Pan trogl
57	6.8	68.0	48	9	BX285564 Arabidops
58	6.8	68.0	48	9	CL521328 SER2H08 F
59	6.8	68.0	48	9	AA087268 mol2g10.r
60	6.8	68.0	49	1	AI900473 scilb08.y
61	6.8	68.0	49	2	BE778801 601463874
62	6.8	68.0	49	2	BE778801 601463874
63	6.8	68.0	49	2	BE778801 601463874
64	6.8	68.0	49	4	BI694186 603347521
65	6.8	68.0	49	7	U38158 OSU38158 FD
66	6.8	68.0	49	8	BZ383782 SALK_1344
67	6.8	68.0	49	9	AJ622567 Drosophil
68	6.8	68.0	49	9	CNS07F9C
69	6.8	68.0	50	1	AU102871 AU102871
70	6.8	68.0	50	1	AU104223 AU104223
71	6.8	68.0	50	1	AU104277 AU104277
72	6.8	68.0	50	1	AU104506 AU104506
73	6.8	68.0	50	1	AU105095 AU105095
74	6.8	68.0	50	1	AU105096 AU105096
75	6.8	68.0	50	1	AU105098 AU105098
76	6.8	68.0	50	1	AU105834 AU105834
77	6.8	68.0	50	1	AU106702 AU106702
78	6.8	68.0	50	1	AU106741 AU106741
79	6.8	68.0	50	1	AU107943 AU107943
80	6.8	68.0	50	1	AU107943 AU107943
81	6.8	68.0	50	8	CC325469 TEA087_Ba
82	6.8	68.0	50	9	AL752914 Arabidops
83	6.8	68.0	51	1	AI132074 un68a06.r
84	6.8	68.0	51	2	BE973423 601652253
85	6.8	68.0	51	5	BU067023 1614_B06-
86	6.8	68.0	51	5	BU583828 mail2b09-
87	6.8	68.0	51	6	CD743956 IRB15_F11
88	6.8	68.0	51	7	CN870791 001205AAO
89	6.8	68.0	51	9	EX215107 Danio rer
90	6.8	68.0	51	9	CC884865 SALK_1446
91	6.8	68.0	51	9	CG712445 1119027A0
92	6.8	68.0	52	1	AI440320 tc82910.x
93	6.8	68.0	52	6	CB379027 xgl6h10.y
94	6.8	68.0	52	7	CR411873 CR411873
95	6.8	68.0	52	8	AZ921909 HRCot3G06
96	6.8	68.0	52	8	BZ287252 SALK_0206
97	6.8	68.0	52	9	CR359266 Arabidops

c 98 6.8 68.0 52 9 TA27H11Q AL453630 T. brucei
 99 6.8 68.0 52 9 CC886264 CC886264 SALK 1483
 c 100 6.8 68.0 52 9 CL302626 CL302626 G063B06 G

ALIGNMENTS

RESULT 1
 CL423499
 LOCUS
 DEFINITION 01S0557-03A1-G02 UniformMu MUTAIL Library zea mays genomic clone
 01S0557-03A1-G02, genomic survey sequence.
 ACCESSION CL423499
 VERSION
 KEYWORDS
 SOURCE GSS.
 ORGANISM Zea mays
 Zea mays
 Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
 Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; PACCAD
 clade; Panicoideae; Andropogoneae; Zea.
 REFERENCE 1 (bases 1 to 14)
 AUTHORS Latshaw,S., Tan,B.-C., Settles,A.M. and McCarty,D.R.
 TITLE Sequence tagged transposon insertions from the UniformMu maize
 population
 JOURNAL Unpublished (2003)
 COMMENT Contact: Donald R. McCarty
 Plant Molecular and Cellular Biology Program
 University of Florida
 PO 110690 Gainesville, FL 32611-0690, USA
 Tel: 352-392-1928 x322
 Email: drmc@ufl.edu
 Sequence flanking probable Mu insertion site in UniformMu
 line: 01S0557-03, Primer set: A
 Class: transposon insertion site.

FEATURES

source
 1. .14
 /organism="Zea mays"
 /mol_type="genomic DNA"
 /strain="W22 (ACR, bz1-m9)"
 /cultivar="UniformMu"
 /db_xref="taxon:4577"
 /clone="01S0557-03A1-G02"
 /clone_lib="UniformMu MUTAIL Library"
 /notes="Vector: TOPO-PCR4; DNA flanking Mu transposon
 insertions in Mu inactive lines were extracted from the
 UniformMu maize population by the thermo asymmetric
 interlaced PCR (TAIL) protocol using primers specific for
 the Mu terminal inverted repeat and a set of 16 arbitrary
 primers. Amplicons were size enriched using Sepharose 400
 spin columns and cloned into the TOPO PCR4 vector."

ORIGIN

Query Match 68.0%; Score 6.8; DB 9; Length 14;
 Best Local Similarity 66.7%; Pred. No. 4.9e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
 : ||: |||
 1 AACCGGTCG 9

RESULT 2
 AJ589126/c
 LOCUS
 DEFINITION Arabidopsis thaliana T-DNA flanking sequence, left border, clone
 545A02, genomic survey sequence.
 ACCESSION AJ589126
 VERSION AJ589126.1 GI:37938750
 KEYWORDS GSS; left border; T-DNA flanking sequence.
 SOURCE Arabidopsis thaliana (thale cress)
 ORGANISM Arabidopsis thaliana
 Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;

Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots;
 rosids; eurosids II; Brassicales; Brassicaceae; Arabidopsi
 1
 Brunaud,V., Balzergue,S., Dubreucq,B., Aubourg,S., Samson,F.,
 Chauvin,S., Bechtold,N., Cruaud,C., DeRose,R., Pelletier,G.,
 Lepiniec,L., Caboche,M. and Lecharny,A.
 T-DNA integration into the Arabidopsis genome depends on sequences
 of pre-insertion sites

EMBO Rep. 3 (12), 1152-1157 (2002)
 22363535
 MEDLINE 12446565
 PUBMED

REFERENCE 2 (bases 1 to 17)
 Balzergue,S.
 TITLE Direct Submission

JOURNAL Submitted (23-OCT-2003) Balzergue S., UMRGV, INRA/CNRS, 2 rue
 Gaston Cremieux, 91057 Evry cedex, FRANCE
 PCR was performed on DNA from transformants of Arabidopsis thaliana
 plants from INRA (Versailles). The DNA fragment(s) resulting from
 the PCR were directly sequenced from the left or the right border
 to determine the genomic sequence flanking the insertion. T-DNA
 derived sequences were removed. Information to order the
 corresponding mutant line and a link to a database providing a
 graphical display of the insertion site are available at
 http://dbsgap.versailles.inra.fr/publiclines/. This sequence has
 been generated in the framework of the French plant genomics
 program 'Genoplante' (http://www.genoplante.com and
 http://genoplante-info.inbio.gen.fr).

FEATURES

source
 1. .17
 /organism="Arabidopsis thaliana"
 /mol_type="genomic DNA"
 /cultivar="Wassilewskija"
 /db_xref="taxon:3702"
 /clone="545A02"
 /clone_lib="Arabidopsis thaliana T-DNA insertion lines"
 /note="T-DNA flanking sequence
 left border"

misc_feature

1. .17
 /note="T-DNA flanking sequence
 left border"

ORIGIN

Query Match 68.0%; Score 6.8; DB 9; Length 17;
 Best Local Similarity 66.7%; Pred. No. 4.8e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
 : ||: |||
 17 TACCGGTCG 9

RESULT 3
 AL043208/c

LOCUS
 DEFINITION DKFZp434H2423_r1_434 (synonym: hteas3) Homo sapiens cDNA clone
 DKFZp434H2423, mRNA sequence.

ACCESSION AL043208
 VERSION AL043208.1 GI:49682496
 KEYWORDS EST.

SOURCE
 ORGANISM Homo sapiens (human)

Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE 1 (bases 1 to 20)
 AUTHORS Blum,H., Bauersachs,S., Mewes,H.W., Gassenhuber,J. and Wiemann,S.
 TITLE EST (Blum, et al.)
 JOURNAL Unpublished (1999)
 COMMENT Contact: MIPS
 MIPS

Ingolstaedter Landstr.1, D-85764 Neuherberg, Germany.

FEATURES

source
 1. .20
 /organism="Homo sapiens"
 /mol_type="mRNA"
 /db_xref="taxon:9606"

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/clone="DKFZp434H2423"
/tissue_type="testis"
/dev_stage="adult"
/lab_host="DH10B"
/clone_lib="434 (synonym: htes3)"
/note="vector: pSport1; Site_1: NotI; Site_2: SalI"

ORIGIN

Query Match      68.0%; Score 6.8; DB 1; Length 20;
Best Local Similarity 66.7%; Pred. No. 4.8e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
   : |||||
Db 11 GACCGGTCG 3

RESULT 4
AZ863356/c
LOCUS
DEFINITION
  A2863356 21 bp DNA linear GSS 21-FEB-2001
  clone UUGC2M0171N17 F, genomic survey sequence.
ACCESSION
  A2863356
VERSION
  A2863356.1 GI:13061409
KEYWORDS
  GSS.
SOURCE
  Mus musculus (house mouse)
ORGANISM
  Eukaryota; Chordata; Craniata; Vertebrata; Euteleostomi;
  Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Mus;
  1 (bases 1 to 21)
REFERENCE
  A2863356 Dunn,D., Aoyagi,A., Barber,M., Beacorn,T., Duval,B., Hamil,C.,
  Ismail,H., Longacre,S., Mahmoud,M., Meenen,E., Pedersen,T.,
  Reilly,M., Rose,R., Stokes,R., Tingey,A., von
  Niederhausern,A. and Wright,D., Weiss,R.
  Mouse whole genome scaffolding with paired end reads from 10kb
  plasmid inserts
JOURNAL
  Unpublished (2000)
COMMENT
  Contact: Robert B. Weiss
  University of Utah Genome Center
  University of Utah
  Rm. 308, Biomedical Polymers Research Bldg., 20 S. 2030 E., SLC, UT
  84112, USA
  Tel: 801 585 5606
  Fax: 801 585 7177
  Email: ddunn@genetics.utah.edu
  Insert Length: 10000 Std Error: 0.00
  Plate: 0171 row: N column: 17
  Seq primer: CGTGTAAACGACGGCCAGT
  Class: plasmid ends
  High quality sequence stop: 21.
  Location/Qualifiers
    1..21
      /organism="Mus musculus"
      /mol_type="genomic DNA"
      /strain="C57BL/6J"
      /db_xref="taxon:10090"
      /clone="UUGC2M0171N17"
      /sex="Male"
      /lab_host="E. Coli strain XL10-Gold, T1-resistant, F-"
      /clone_lib="Mouse 10kb plasmid UUGC1M library"
      /note="vector: PWD42nv; Purified genomic DNA from M.
      musculus C57BL/6J (male) was obtained from the Jackson
      Laboratory Mouse DNA Resource
      (http://www.jax.org/resources/documents/dnares/). The DNA
      was hydrodynamically sheared by repeated passage through a
      0.005 inch orifice at constant velocity. The sheared DNA
      was blunt end-repaired with T4 DNA polymerase and T4
      polynucleotide kinase. Adaptor oligonucleotides were
      ligated to the blunt ends in high molar excess. The
      adaptor DNA was purified and size-selected for a 9.5 to
      10.5 kb range using preparative agarose gel
      electrophoresis. Vector DNA was prepared from a derivative
      of pWD42 (gi|4732114|gb|AF129072.1), a copy-number

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inducible derivative of plasmid R1. The vector was ligated
with adaptors complementary to the insert adaptors and
purified. The sheared, adapted mouse DNA was annealed to
adapted vector DNA, and transformed into
chemically-competent E. coli XL10-Gold (Stratagene) cells
and selected for ampicillin resistance."

ORIGIN

Query Match      68.0%; Score 6.8; DB 8; Length 21;
Best Local Similarity 66.7%; Pred. No. 4.8e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
   : |||||
Db 14 GACCGGTCG 6

RESULT 5
CA851061
LOCUS
DEFINITION
  CA851061 22 bp mRNA linear EST 01-AUG-2003
  D09F11_K11_12.ab1 cDNA Peking library 2, 4 day SCN3 Glycine max
  cDNA clone D09F11 5', mRNA sequence.
ACCESSION
  CA851061
VERSION
  CA851061.1 GI:33387854
KEYWORDS
  EST.
SOURCE
  Glycine max (soybean)
ORGANISM
  Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
  Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots;
  rosids; eurosids I; Fabales; Fabaceae; Papilionoideae; Phaseoleae;
  Glycine.
  1 (bases 1 to 22)
REFERENCE
  Alkharouf,N.W., Khan,R. and Matthews,B.F.
  Analysis of expressed sequence tags from roots of resistant soybean
  infected by the soybean cyst nematode
JOURNAL
  Unpublished (2002)
COMMENT
  Contact: Alkharouf, N.W.
  Soybean Genomics and Improvement Laboratory (SGIL)
  US Department of Agriculture (USDA), ARS, PSI
  Bldg.006, Rm 118, 10300 Baltimore Ave., Beltsville, MD 20705-2350,
  USA
  Tel: 301 504 5750
  Fax: 301 504 5728
  Email: alkharouf@ars.usda.gov.
  Location/Qualifiers
    1..22
      /organism="Glycine max"
      /mol_type="mRNA"
      /cultivar="Peking"
      /db_xref="taxon:3847"
      /clone="D09F11"
      /tissue_type="Roots"
      /dev_stage="Seedlings"
      /clone_lib="cDNA Peking library 2, 4 day SCN3"
      /note="Vector: pBluescript SK-; cDNA clones from mRNA
      extracted from Peking roots 2 and 4 days past invasion."

ORIGIN

Query Match      68.0%; Score 6.8; DB 6; Length 22;
Best Local Similarity 66.7%; Pred. No. 4.7e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
   : |||||
Db 12 TATCGGTCG 20

RESULT 6
AJ593585
LOCUS
DEFINITION
  AJ593585 22 bp DNA linear GSS 15-JAN-2004
  Arabidopsis thaliana T-DNA flanking sequence, left border, clone
  384A02, genomic survey sequence.
ACCESSION
  AJ593585

```

AJ593585.1 GI:37943209
 GSS; left border; T-DNA flanking sequence.
 Arabidopsis thaliana (thale cress)
 Arabidopsis thaliana
 Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
 Spermatophyta; Magnoliopsida; eudicotyledons; core eudicots;
 rosids; eurosids II; Brassicales; Brassicaceae; Arabidopsids.

1
 Brunaud V., Balzerque S., Dubreucq B., Aubourg S., Samson F.,
 Chauvin S., Bechtold N., Cruaud C., DeRose R., Fellertier G.,
 Lepiniec L., Caboche M. and Lecharny A.
 T-DNA integration into the Arabidopsis genome depends on sequences
 of pre-insertion sites
 EMBO Rep. 3 (12), 1152-1157 (2002)
 MEDLINE
 22363535
 PubMed
 12445565

2 (bases 1 to 22)
 Balzerque S.
 Direct Submission
 Submitted (23-OCT-2003) Balzerque S., UMRGV, INRA/CNRS, 2 rue
 Gaston Cremieux, 91057 Evry cedex, FRANCE
 PCR was performed on DNA from transformants of Arabidopsis thaliana
 plants from INRA (Versailles). The DNA fragment(s) resulting from
 the PCR were directly sequenced from the left or the right border
 to determine the genomic sequence flanking the insertion. T-DNA
 derived sequences were removed. Information to order the
 corresponding mutant line and a link to a database providing a
 graphical display of the insertion site are available at
<http://dbsgap.versailles.inra.fr/publiclines/>. This sequence has
 been generated in the framework of the French plant genomics
 program 'Genoplante' (<http://www.genoplante.com> and
<http://genoplante-info.infobiogen.fr>).

FEATURES
 source
 1..22
 /organism="Arabidopsis thaliana"
 /mol_type="genomic DNA"
 /cultivar="Wassiljewskij a"
 /db_xref="taxon:3702"
 /clone="384A02"
 /clone_lib="Arabidopsis thaliana T-DNA insertion lines"
 misc_feature
 1..22
 /notes="T-DNA flanking sequence
 left border"

ORIGIN
 Query Match 68.0%; Score 6.8; DB 9; Length 22;
 Best Local Similarity 66.7%; Pred. No. 4.7e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
 :|||:|
 Db 14 GACCGGFCG 22

RESULT 7
 TA266D03P/c
 LOCUS
 DEFINITION
 T. brucei sheared genomic DNA clone 266d03, forward sequence,
 genomic survey sequence.
 ACCESSION
 AL488313
 VERSION
 AL488313.1 GI:11864165
 KEYWORDS
 GSS.
 SOURCE
 Trypanosoma brucei
 Trypanosoma brucei
 Eukaryota; Euglenozoa; Kinetoplastida; Trypanosomatidae;
 Trypanosoma.
 1 (bases 1 to 23)
 Hall N., Bowman S., Lennard N.J., Doggett J., Atkin R.,
 Chillingworth C., Ormond D., Harris B., El-Sayed N., Hou L.,
 Melville S.B., Rajandream M.A. and Barrell B.G.
 Direct Submission
 Submitted (10-DEC-2000) Trypanosoma brucei genome sequencing
 project, Sanger Centre, The Wellcome Trust Genome Campus, Hinxton,

Cambridge CB10 1SA, E-mail: barrell@sanger.ac.uk and
 nh1@sanger.ac.uk
 Constructed at the Institute for Genomic Research (TIGR),
 Rockville, MD. Genomic DNA isolated from a cloned population of
 Trypanosoma brucei (TREU927/4 GUTat 10.1) was mechanically sheared
 to give a tight size distribution (4 kb). The v + i method used for the library construction is
 described in detail in Smith, H. and Venter, J.C. (Making small
 insert libraries for whole genome shotgun sequencing projects. In
 Genome Sequencing: A Practical Approach, eds. M. Vaudin and B.
 Barrell, Oxford University Press, 1999).
 Email: nelsayed@tigr.org
 Details of T. brucei sequencing at the Sanger Centre are available
 at http://www.sanger.ac.uk/Projects/T_brucei/.

FEATURES
 source
 1..23
 /organism="Trypanosoma brucei"
 /mol_type="genomic DNA"
 /strain="TREU927"
 /db_xref="taxon:5691"
 /clone="266d03"

ORIGIN
 Query Match 68.0%; Score 6.8; DB 9; Length 23;
 Best Local Similarity 66.7%; Pred. No. 4.7e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
 :|||:|
 Db 22 AAGCGTTCG 14

RESULT 8
 CO784722
 LOCUS
 DEFINITION
 BL281C A09 6-Day Axolotl Tail Blastema (6DAXBL) Ambystoma mexicanum
 cDNA 57 similar to hypothetical protein, mRNA sequence.
 ACCESSION
 CO784722
 VERSION
 CO784722.1 GI:51000702
 SOURCE
 EST.
 ORGANISM
 Ambystoma mexicanum (axolotl)
 Ambystoma mexicanum
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Amphibia; Batrachia; Caudata; Salamandroidea; Ambystomidae;
 Ambystoma.
 1 (bases 1 to 24)
 Habermann B., Bebin A.G., Herklotz S., Volkmer M., Eckelt K.,
 Pehlike K., Epperlein H.H., Schackert H.K., Wiebe G. and Tanaka E.M.
 An Ambystoma mexicanum EST sequencing project: Analysis of 17,352
 expressed sequence tags from embryonic and regenerating blastema
 cDNA libraries
 Genome Biol. (2004) In press
 Contact: Elly M. Tanaka
 Tanaka Lab
 Max Planck Institute of Molecular Cell Biology and Genetics,
 Dresden
 Pfotenhauerstrasse 108, 01307 Dresden, Germany
 Tel: 0049 351 210 2620
 Fax: 0049 351 210 1489
 Email: tanaka@mpi-cbg.de
 Plate: BL281C row: 09 column: A
 Seq primer: GCA CAT TAG GCC TAT TTA GGT GAC A.
 FEATURES
 source
 1..24
 /organism="Ambystoma mexicanum"
 /mol_type="mRNA"
 /db_xref="taxon:8296"
 /tissue_type="Tail Blastema"
 /cell_type="regenerating tail blastema"
 /clone_lib="6-Day Axolotl Tail Blastema (6DAXBL)"
 /note="Vector: pCMVSPORT6; Site 1: NotI; Site 2: SalI;
 Unnormalized cDNA plasmid library prepared by Invitrogen.
 Size fractionated mRNA was polydt primed and cloned into

NCBI-Sali site of PCMVSPORT6. Bacterial host is EM8110B-10NA. Average insert size is 1.67 KB.
TAG_LTB=6DAXBL"

ORIGIN

Query Match 68.0%; Score 6.8; DB 7; Length 24;
Best Local Similarity 66.7%; Pred. No. 4.7e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: |||:
Db 7 TACCGTCG 15

RESULT 9
AZ877656
LOCUS
DEFINITION
25 bp DNA linear GSS 26-FEB-2001
BQ00754-3prime Drosophila melanogaster P{Grl} P element insertion
lines Drosophila melanogaster genomic Sequence recovered from 3'
end of P element, genomic survey sequence.

ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
AZ877656
GSS.
Drosophila melanogaster (fruit fly)
Drosophila melanogaster
Bukayota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha;
Ephydroidea; Drosophilidae; Drosophila.
1 (bases 1 to 25)
Lewis, R., Hoskins, R., Liao, G., Mozdzen, N., Tsang, G., He, Y.,
Karsen, G., Bellen, H., Rubin, G. and Spradling, A.
The Berkeley Drosophila Genome Project Gene Disruption Project
Unpublished (2001)
Contact: Gerald Rubin
Berkeley Drosophila Genome Project
University of California, Berkeley
LSA Building, Berkeley, CA 94720-3200, USA
Fax: 5106439947
Email: gerry@fruitfly.berkeley.edu
Sequence recovery method was inverse PCR.
Sequence orientation is forward strand relative to 5' end of P
element
The P element insertion position is base 1 in the 25 bases. This
insertion position refers to the first base of the 8 base target
recognition sequence.
Class: transposon-tagged.

FEATURES
source
1..25
Location/Qualifiers
/organism="Drosophila melanogaster"
/mol_type="genomic DNA"
/db_xref="taxon:7227"
/clone_lib="Drosophila melanogaster P{Grl} P element
insertion lines"
/note="Inverse PCR was performed on Drosophila
melanogaster strains each of which contains one or more
P{Grl} P-element transposon insertion. The resultant
fragment for each strain was directly sequenced to
determine the genomic sequence at the site of insertion.
Details of the protocols used can be found at
<http://www.fruitfly.org/about/methods/inverse.pcr.html>."

ORIGIN

Query Match 68.0%; Score 6.8; DB 8; Length 25;
Best Local Similarity 66.7%; Pred. No. 4.7e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: |||:
Db 15 GATCGTCG 23

RESULT 10
AA17506/c

KEYWORDS
SOURCE Oryza sativa (japonica cultivar-group)
ORGANISM Oryza sativa (japonica cultivar-group)
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; Ehrhartoidae; Oryzaceae; Oryza.

REFERENCE
1 (bases 1 to 28)
Kim,J.S., Jun,K.M., Cheong,P.J., Kim,M.J., Lee,T.H., Shin,Y.C., Song,S.I., Kim,J.K., Kim,Y.-K. and Nam,B.H.
Large-scale Sequencing Analysis of Rice ESTs
Unpublished (2003)

TITLE
JOURNAL
COMMENT
Genomics and Genetics Institute, GreenGene Biotech Inc.; Division of Bioscience and Bioinformatics, Myongji University
Yongin, Kyeonggi, Korea
Tel: 82 31 330 6193
Fax: 82 31 321 6355
Email: bhnahm@gbio.com, bhnahm@bio.myongji.ac.kr.

FEATURES
source
1..28
/organism="Oryza sativa (japonica cultivar-group)"
/mol_type="mRNA"
/cultivar="Nackdong"
/db_xref="taxon:39947"
/clone="NACL-03-A03"
/tissue_type="callus"
/dev_stage="proliferated callus on 2N6 media for 30 days"
/lab_host="E.coli DH10B"
/clone_lib="Rice callus plasmid cDNA library (NACL)"
/notes="Vector: PCR4-TOPO; Site 1: EcoRI; mRNA was capped with oligoribonucleotides and then used as templates for RT-PCR."

ORIGIN
Query Match 68.0%; Score 6.8; DB 7; Length 28;
Best Local Similarity 66.7%; Pred. No. 4.7e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCTCG 10
: |||:|
Db 19 TAGCGTTCG 11

RESULT 12
DME545945/c
LOCUS DME545945 28 bp DNA linear GSS 24-FEB-2003
DEFINITION Drosophila melanogaster flanking sequence of RS P element insertion P{RS3}UM-8214-3, clone library P{RS3}, genomic survey sequence.
ACCESSION AJ545945
VERSION AJ545945.1 GI:28553861
KEYWORDS GSS; genome survey sequence.
SOURCE Drosophila melanogaster (fruit fly)
ORGANISM Drosophila melanogaster
Eukaryota; Metazoa; Arthropoda; Insecta; Pterygota; Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha; Ephydroidea; Drosophilidae; Drosophila.

REFERENCE
1
Ryder,E.J., Ashburner,M., Baguna,J., Blows,F., Bucheton,A., Coulson,D., Dickson,B., Drummond,J., Glover,D., Gunton,N., Hafen,E., Hall,S., Heisenberg,M., Lepesant,J.A., Maroy,P., Mechler,B., O'Kane,C., Pflugfelder,G., Rasmuson-Lestander,A., Reuter,G., Roote,J., Szidony,J., Wang,S., Webster,J. and Russell,J.S.
Mapping of RS P element insertions in Drosophila melanogaster for the DrosDel second generation deficiency kit
Unpublished
2 (bases 1 to 28)
Ryder,E.J.
Direct Submission
Submitted (17-FEB-2003) Ryder E.J., Department of Genetics, University of Cambridge, Downing Street, CB2 3EH, UNITED KINGDOM
The insertion point of the P element is before base 1 of the sequence. Further information about this P element insertion line

can be found at <http://www.flyseq.org.uk> and <http://www.drosdel.org.uk>.

FEATURES
source
1..28
Location/Qualifiers
/organism="Drosophila melanogaster"
/mol_type="genomic DNA"
/db_xref="taxon:7227"
/chromosome="3R"
/clone="p{RS3}UM-8214-3"
/clone_lib="P{RS3}"
/note="read=5' end"
misc_feature
1..28
/note="P element insertion in the 5' to 3' orientation"

ORIGIN
Query Match 68.0%; Score 6.8; DB 9; Length 28;
Best Local Similarity 66.7%; Pred. No. 4.7e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCTCG 10
: |||:|
Db 12 TAACGTTCG 4

RESULT 13
CO789974
LOCUS CO789974 29 bp mRNA linear EST 05-AUG-2004
DEFINITION NT008B.G01 St18-22 Neural tube (NT) Ambystoma mexicanum cDNA 5', similar to hypothetical protein, mRNA sequence.
ACCESSION CO789974
VERSION CO789974.1 GI:51005945
KEYWORDS EST.
SOURCE Ambystoma mexicanum (axolotl)
ORGANISM Ambystoma mexicanum
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Amphibia; Batrachia; Caudata; Salamandroidea; Ambystomatidae; Ambystoma.

REFERENCE
1 (bases 1 to 29)
Habermann,B., Bebin,A.G., Herklotz,S., Volkmer,M., Eckelt,K., Pehlke,K., Epperlein,H.H., Schackert,H.K., Wiebe,G. and Tanaka,E.M.
An Ambystoma mexicanum EST sequencing project: Analysis of 17,352 expressed sequence tags from embryonic and regenerating blastema cDNA libraries
Genome Biol. (2004) In press
Contact: Ely M. Tanaka
Tanaka lab
Max Planck Institute of Molecular Cell Biology and Genetics, Dresden
Pfothenhauerstrasse 108, 01307 Dresden, Germany
Tel: 0049 351 210 2620
Fax: 0049 351 210 1489
Email: tanaka@mpi-cbg.de
Plate: NT008B row: 01 column: G
Seq primer: GCA CAT TAG GCC TAT TTA GGT GAC A.

FEATURES
source
1..29
Location/Qualifiers
/organism="Ambystoma mexicanum"
/mol_type="mRNA"
/db_xref="taxon:8296"
/tissue_type="Neural Tube, Notochord, Somites"
/cell_type="Includes Neural tube, notochord, somites"
/dev_stage="Stage 18-22"
/clone_lib="St18-22 Neural tube (NT)"
/note="Vector: pCMVSPORT6; Site 1: NotI; Site 2: SalI; Unnormalized cDNA plasmid library prepared by Invitrogen. Size fractionated mRNA was polydt primed and cloned into NotI-SalI site of pCMVSPORT6. Bacterial host is ENDH10B-TONA. Average insert size is 1.5 kb.
TAG_LIB=NT"

ORIGIN
Query Match 68.0%; Score 6.8; DB 7; Length 29;
Best Local Similarity 66.7%; Pred. No. 4.7e+05;


```

Class: TDNA tagged.
FEATURES
    source
        1..33
        /organism="Arabidopsis thaliana"
        /mol_type="genomic DNA"
        /ecotype="Col-0"
        /db_xref="taxon:3702"
        /clone="SALK 134372.19.10.n"
        /clone_lib="Arabidopsis thaliana TDNA insertion lines"
        /notes="PCR was performed on Arabidopsis thaliana lines
        each of which contains one or more TDNA insertion
        elements. The resultant fragment for each line was
        directly sequenced to determine the genomic sequence at
        the site of insertion. Details of the protocols used can
        be found at http://signal.salk.edu/tdna\_protocols.html"

ORIGIN
Query Match 68.0%; Score 6.8; DB 8; Length 33;
Best Local Similarity 66.7%; Pred. No. 4.6e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
   :|||:|
Db 1 GATCGTTCG 9

RESULT 17
AU258533/c
LOCUS AU258533 3'-directed mouse cDNA library Mus musculus cDNA clone
DEFINITION BED0013178 3', mRNA sequence.
ACCESSION AU258533
VERSION AU258533.1 GI:20324188
KEYWORDS EST.
SOURCE Mus musculus (house mouse)
ORGANISM Mus musculus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
1 (bases 1 to 34)
Kato, K. and Matoba, R.
Generation of expressed sequence tags from mouse brain
Unpublished (2002)
Contact: Kikuya Kato
Graduate School of Biological Sciences
Nara Institute of Science and Technology
8916-5 Takayama, Ikoma, Nara 630-0101, Japan
Tel: 81-743-72-5581
Fax: 81-743-72-5589
Email: kkatob@bs.aist-nara.ac.jp.
URL: http://love2.aist-nara.ac.jp/BED/index.html.
Location/Qualifiers
    1..34
    /organism="Mus musculus"
    /mol_type="mRNA"
    /db_xref="taxon:10090"
    /clone="BED0013178"
    /tissue_type="brain"
    /clone_lib="3'-directed mouse cDNA library"

ORIGIN
Query Match 68.0%; Score 6.8; DB 1; Length 34;
Best Local Similarity 66.7%; Pred. No. 4.6e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
   :|||:|
Db 27 TAGCGTTCG 19

RESULT 18
BZ379444/c
LOCUS BZ379444 34 bp DNA linear GSS 26-NOV-2002
DEFINITION SALK_113356.43.05.n Arabidopsis thaliana TDNA insertion lines
survey sequence.
Arabidopsis thaliana genomic clone SALK_113356.43.05.n, genomic
survey sequence.
BZ379444
BZ379444.1 GI:25471279
GSS.
Arabidopsis thaliana (thale cress)
Arabidopsis thaliana
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots;
rosids; eurosids II; Brassicales; Brassicaceae; Arabidopsi.
1 (bases 1 to 34)
Alonso, J.M., Leisse, T.J., Barajas, P., Chen, H., Cheuk, R.,
Gadzinab, C., Jeske, A., Karnes, M., Kim, C.J., Parker, H., Prednis, L.,
Shinn, P., Zimmerman, J. and Ecker, J.R.
A Sequence-Indexed Library of Insertion Mutations in the
Arabidopsis Genome
Unpublished (2001)
Contact: Joseph R. Ecker
Salk Institute Genomic Analysis Laboratory (SIGNAL)
The Salk Institute for Biological Studies
10010 N. Torrey Pines Road, La Jolla, CA 92037, USA
Tel: 858 453 4100 x1752
Fax: 858 558 6379
Email: ecker@salk.edu
This is single pass sequence recovered from the left border of
TDNA. This sequence lies within 300 bases of the 5' end of
At2G20560.
Class: TDNA tagged.
Location/Qualifiers
    1..34
    /organism="Arabidopsis thaliana"
    /mol_type="genomic DNA"
    /ecotype="Col-0"
    /db_xref="taxon:3702"
    /clone="SALK 113356.43.05.n"
    /clone_lib="Arabidopsis thaliana TDNA insertion lines"
    /note="PCR was performed on Arabidopsis thaliana lines
    each of which contains one or more TDNA insertion
    elements. The resultant fragment for each line was
    directly sequenced to determine the genomic sequence at
    the site of insertion. Details of the protocols used can
    be found at http://signal.salk.edu/tdna\_protocols.html"

ORIGIN
Query Match 68.0%; Score 6.8; DB 8; Length 34;
Best Local Similarity 66.7%; Pred. No. 4.6e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
   :|||:|
Db 25 GACCGTTCG 17

RESULT 19
BF784959
LOCUS BF784959 37 bp mRNA linear EST 12-JAN-2001
DEFINITION 60210922F1 NCI CGAP_Kid14 Mus musculus cDNA clone IMAGE:4239124
5', mRNA sequence.
ACCESSION BF784959
VERSION BF784959.1 GI:12089995
KEYWORDS EST.
SOURCE Mus musculus (house mouse)
ORGANISM Mus musculus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
1 (bases 1 to 37)
NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Jeffrey E. Green, M.D.
cDNA Library Preparation: Life Technologies, Inc.

```

CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LNL)
 DNA Sequencing by: Incyte Genomics, Inc.
 Clone distribution: MGC clone distribution information can be
 found through the I.M.A.G.E. Consortium/LNL at:
<http://image.llnl.gov>

Plate: L1AM9851 row: 1 column: 05
 High quality sequence stop: 28.
 Location/Qualifiers

FEATURES

source

1. .37

/organism="Mus musculus"
 /mol_type="mRNA"
 /strain="FVB/N"
 /db_xref="taxon:10090"
 /clone="IMAGE:4239124"
 /lab_host="DH10B (TI phage-resistant)"
 /clone_lib="NCI_CGAP Kid14"
 /notes="Organ: kidney; Vector: pCMV-SPORT6; Site 1: NotI;
 Site 2: SalI; Cloned unidirectionally. Primer: Oligo dt.
 Average insert size 1.75 kb. Constructed by Life
 Technologies. Note: this is a NCI_CGAP Library. |"

ORIGIN

Query Match 68.0%; Score 6.8; DB 2; Length 37;
 Best Local Similarity 66.7%; Pred. No. 4.6e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 2 DANCCKTCG 10
 : |||:
 Db 9 GAGCGGTCG 17

RESULT 20

BI658475 37 bp mRNA linear EST 12-SEP-2001
 LOCUS 603282091F1 NCI_CGAP_Mam4 Mus musculus cDNA clone IMAGE:5326558 5',
 DEFINITION mRNA sequence.

ACCESSION BI658475

VERSION BI658475.1 GI:15572711

KEYWORDS EST.

SOURCE Mus musculus (house mouse)

ORGANISM

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
 1 (bases 1 to 37)

REFERENCE NIH-MGC <http://mgc.nci.nih.gov/>.

National Institutes of Health, Mammalian Gene Collection (MGC)

Unpublished (1999)

CONTACT: Robert Strausberg, Ph.D.

Email: cgapbs-rc@mail.nih.gov

Tissue Procurement: Lothar Hennighausen Ph.D., Priscilla Furth

Ph.D.

CDNA Library Preparation: Life Technologies, Inc.

CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LNL)

DNA Sequencing by: Incyte Genomics, Inc.

Clone distribution: MGC clone distribution information can be

found through the I.M.A.G.E. Consortium/LNL at:

<http://image.llnl.gov>

Plate: L1AM11828 row: 1 column: 23

High quality sequence stop: 37.

FEATURES

source

1. .37
 /organism="Mus musculus"
 /mol_type="mRNA"
 /strain="NMRI"
 /db_xref="taxon:10090"
 /clone="IMAGE:5326558"
 /tissue_type="tumor, gross tissue"
 /dev_stage="5 months"
 /lab_host="DH10B"
 /clone_lib="NCI_CGAP Mam4"

/notes="Organ: mammary; Vector: pCMV-SPORT6; Site 1: SalI;
 Site 2: NotI; Cloned unidirectionally. Primer: Oligo dt.
 Library constructed by Life Technologies. Investigators

ORIGIN

Query Match 68.0%; Score 6.8; DB 4; Length 37;
 Best Local Similarity 66.7%; Pred. No. 4.6e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 2 DANCCKTCG 10
 : |||:
 Db 4 GAGCGGTCG 12

RESULT 21

LOCUS AQ025003

DEFINITION

AQ025003 38 bp DNA linear GSS 23-AUG-2000
 EP(2)0966 Drosophila melanogaster EP line Drosophila melanogaster
 genomic sequence recovered from 5' end of P element, genomic survey
 sequence.

ACCESSION AQ025003

VERSION AQ025003.1 GI:3265355

KEYWORDS GSS.

SOURCE Drosophila melanogaster (fruit fly)

ORGANISM

Drosophila melanogaster
 Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
 Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha;
 Ephydroidea; Drosophilidae; Drosophila.

REFERENCE 1 (bases 1 to 38)

AUTHORS Liao,G.-C., Rehm,E.J. and Rubin,G.M.

TITLE Insertion site preferences of the P transposable element in

Drosophila melanogaster

JOURNAL Proc. Natl. Acad. Sci. U.S.A. 97 (7), 3347-3351 (2000)

MEDLINE 20202638

PUBMED 10716700

COMMENT

Contact: Gerald Rubin
 Berkeley Drosophila Genome Project
 University of California, Berkeley
 LSA Building, Berkeley, CA 94720-3200, USA
 Fax: 5106439947
 Email: germy@fruitfly.berkeley.edu
 Sequence recovery method was inverse PCR.

Sequence orientation is forward strand relative to 5' end of P
 element

The P element insertion position is base 31 in the 38 bases. This
 insertion position refers to the first base of the 8 base target
 recognition sequence.

Class: transposon-tagged.

Location/Qualifiers

source

1. .38
 /organism="Drosophila melanogaster"
 /mol_type="genomic DNA"
 /db_xref="taxon:7227"
 /clone_lib="Drosophila melanogaster EP line"
 /note="Inverse PCR was performed on Drosophila
 melanogaster strains each of which contains a single EP
 transposable element insertion. (The generation of these
 insertion strains is described in Rorth P, Szabo K, Bailey
 A, Lavery T, Rehm J, Rubin GM, Weigmann K, Milan M, Benes
 V, Ansoorge W, Cohen SM. 1998. Systematic gain-of-function
 genetics in Drosophila. Development 6:1049-1057.) The
 resultant fragment for each strain was directly sequenced
 to determine the genomic sequence at the site of
 insertion. Details of the protocols used can be found at
http://fruitfly.berkeley.edu/p_disrupt/inverse_per.html."

ORIGIN

Query Match 68.0%; Score 6.8; DB 8; Length 38;
 Best Local Similarity 66.7%; Pred. No. 4.6e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

```

QY      2 DANCCKTCG 10
      : |||||
Db      7 AACCGTTCG 15

RESULT 22
TA335E03Q/c
LOCUS   TA335E03Q
DEFINITION
T. brucei sheared genomic DNA clone 335E03, reverse sequence,
genomic survey sequence.
ACCESSION
AL492118
VERSION  AL492118.1 GI:11868418
KEYWORDS
SOURCE   GSS.
ORGANISM
Trypanosoma brucei
Trypanosomatidae; Kinetoplastida; Trypanosomatidae;
Eukaryota; Euglenozoa;
Trypanosoma.
1 (bases 1 to 38)
Hall,N., Bowman,S., Lennard,N.J., Doggett,J., Atkin,R.,
Chillingworth,C., Ormond,D., Harris,B., El-Sayed,N., Hou,L.,
Melville,S.E., Rajandream,M.A. and Barrell,B.G.
Direct Submission
Submitted (10-DEC-2000) Trypanosoma brucei genome sequencing
project, Sanger Centre, The Wellcome Trust Genome Campus, Hinxton,
Cambridge CB10 1SA, E-mail: barrell@sanger.ac.uk and
nh@sanger.ac.uk
Constructed at the Institute for Genomic Research (TIGR),
Rockville, MD. Genomic DNA isolated from a cloned population of
Trypanosoma brucei (TREU927/4 GUTat 10.1) was mechanically sheared
to give a tight size distribution (
4 kb). The v + i method used for the library construction is
described in detail in Smith, H. and Venter, J.C. (Making small
insert libraries for whole genome shotgun sequencing projects. In
Genome sequencing: A Practical Approach, eds. M. Vaudin and B.
Barrell, Oxford University Press, 1999).
Email: nelsayed@tigr.org
Details of T. brucei sequencing at the Sanger Centre are available
at http://www.sanger.ac.uk/Projects/T_brucei/.
Location/Qualifiers
1. .38
/organism="Trypanosoma brucei"
/mol_type="genomic DNA"
/strain="TREU927"
/db_xref="taxon:5691"
/clone="335E03"

ORIGIN
Query Match 68.0%; Score 6.8; DB 9; Length 38;
Best Local Similarity 66.7%; Pred. No. 4.6e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY      2 DANCCKTCG 10
      : |||||
Db      17 TAACGTTTCG 9

RESULT 23
CL682259/c
LOCUS   CL682259
DEFINITION
P10133C A09.2 - P10133C.BR (38) Mixed stage fosmid library of P.
pacificus var. California Pristionchus pacificus genomic, genomic
survey sequence.
ACCESSION
CL682259
VERSION  CL682259.1 GI:501899587
KEYWORDS
SOURCE   GSS.
ORGANISM
Pristionchus pacificus
Pristionchus pacificus
Eukaryota; Metazoa; Nematoda; Chromadorea; Diplogasterida;
Neodiplogasteridae; Pristionchus.
1 (bases 1 to 38)
Srinivasan,J., Otto,G.W., Kahlow,U., Geisler,R. and Sommer,R.J.
AppaDB: an AcedB database for the nematode satellite organism
Pristionchus pacificus

```

```

JOURNAL
COMMENT
Nucleic Acids Res. 32 (1), D421-D422 (2004)
Contact: Sommer RJ
Evolutionary Biology
Max-Planck-Institute for Developmental Biology
Spemannstr. 37-39, Tuebingen D-72076, Germany
Tel: 00497071601371
Fax: 00497071601498
Email: ralf.sommer@tuebingen.mpg.de
This library was generated at Caltech, Pasadena, USA and end
sequenced at Vancouver, Canada.
Seq primer: T7
Class: fosmid ends.
Location/Qualifiers
1. .38
/organism="Pristionchus pacificus"
/mol_type="genomic DNA"
/strain="California"
/db_xref="taxon:54126"
/clone_lib="Mixed stage fosmid library of P. pacificus
var. California"
/note="Vector: pEpifos-5 Fosmid vector"

ORIGIN
Query Match 68.0%; Score 6.8; DB 9; Length 38;
Best Local Similarity 66.7%; Pred. No. 4.6e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY      2 DANCCKTCG 10
      : |||||
Db      16 AAGCGGTCG 8

RESULT 24
BI658553
LOCUS   BI658553
DEFINITION
603283781F1 NCI_CGAP_Mam4 Mus musculus cDNA clone IMAGE:5327901 5',
mRNA sequence.
ACCESSION
BI658553
VERSION  BI658553.1 GI:15572789
KEYWORDS
SOURCE   EST.
ORGANISM
Mus musculus (house mouse)
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
1 (bases 1 to 40)
NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
Contact: Robert Strausberg, Ph.D.
Email: cgabbs-r@mail.nih.gov
Tissue Procurement: Lothar Hennighausen Ph.D., Priscilla Furth
Ph.D.
cDNA Library Preparation: Life Technologies, Inc.
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can be
found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
Plate: LLAM11832 row: a column: 22
High quality sequence stop: 37.
Location/Qualifiers
1. .40
/organism="Mus musculus"
/mol_type="mRNA"
/strain="NMRI"
/db_xref="taxon:10090"
/clone="IMAGE:5327901"
/tissue_type="tumor, gross tissue"
/dev_stage="5 months"
/lab_host="DH10B"
/clone_lib="NCI_CGAP_Mam4"
/note="Organ: mammary; Vector: pCMV-SPORT6; Site 1: SalI;
Site 2: NotI; Cloned unidirectionally. Primer: Oligo dt.

ORIGIN

```

Library constructed by Life Technologies. Investigators providing samples: Lothar Hennighausen/Priscilla Furch, NIH Reference for transgenic model: Li et al., Cell Growth and Differentiation 7, 3-11 (1996)."

ORIGIN
Query Match 68.0%; Score 6.8; DB 4; Length 40;
Best Local Similarity 66.7%; Pred. No. 4.6e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCTGTCG 10
: |||: |||

Db 11 GAGCGTGC 19
: |||: |||

RESULT 25
AJ598365
LOCUS 40 bp DNA linear GSS 15-JAN-2004
DEFINITION Arabidopsis thaliana T-DNA flanking sequence, right border, clone 467A05, genomic survey sequence.

ACCESSION AJ598365
VERSION AJ598365.1 GI:37947993
KEYWORDS GSS; right border; T-DNA flanking sequence.
SOURCE Arabidopsis thaliana (thale cress)
ORGANISM Arabidopsis thaliana

REFERENCE 1
AUTHORS Brunaud V., Balzerque S., Dubreucq B., Aubourg S., Samson P., Chauvin S., Bechtold N., Cruaud C., DeRose R., Pelletier G., Lepiniec L., Caboche M. and Lecharny A.
TITLE T-DNA integration into the Arabidopsis genome depends on sequences of pre-insertion sites

JOURNAL EMBO Rep. 3 (12), 1152-1157 (2002)
MEDLINE 22363535
PUBMED 12448565
REFERENCE 2 (bases 1 to 40)
AUTHORS Balzerque S.
TITLE Direct Submission
JOURNAL Submitted (23-OCT-2003) Balzerque S., UMRGV, INRA/CNRS, 2 rue Gaston Cremieux, 91057 Evry cedex, FRANCE

COMMENT PCR was performed on DNA from transformants of Arabidopsis thaliana plants from INRA (Versailles). The DNA fragment(s) resulting from the PCR were directly sequenced from the left or the right border to determine the genomic sequence flanking the insertion. T-DNA derived sequences were removed. Information to order the corresponding mutant line and a link to a database providing a graphical display of the insertion site are available at <http://dbsgap.versailles.inra.fr/publiclines/>. This sequence has been generated in the framework of the French plant genomics program 'Genoplante' (<http://www.genoplante.com> and <http://genoplante-info.infobiogen.fr>).

FEATURES
source
1. .40
Location/Qualifiers
/organism="Arabidopsis thaliana"
/mol_type="genomic DNA"
/cultivar="Wassiljewskaja"
/db_xref="taxon:3702"
/clone="467A05"
/clone_lib="Arabidopsis thaliana T-DNA insertion lines"
misc_feature 1. .40
/notes="T-DNA flanking sequence right border"

ORIGIN
Query Match 68.0%; Score 6.8; DB 9; Length 40;
Best Local Similarity 66.7%; Pred. No. 4.6e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCTGTCG 10
: |||: |||

Db 13 TATCGTGC 21
: |||: |||

RESULT 26
BX660365/c

LOCUS 40 bp DNA linear GSS 04-APR-2004
DEFINITION Arabidopsis thaliana T-DNA flanking sequence GK-653E07-022839, genomic survey sequence.

ACCESSION BX660365
VERSION BX660365.1 GI:37616753
KEYWORDS GSS.
SOURCE Arabidopsis thaliana (thale cress)
ORGANISM Arabidopsis thaliana

REFERENCE 1
AUTHORS Li, Y., Rosso, M.G., Strizhov, N., Viehoveer, P. and Weisshaar, B.
TITLE GABI-Kat SimpleSearch: a flanking sequence tag (FST) database for the identification of T-DNA insertion mutants in Arabidopsis thaliana

JOURNAL Bioinformatics 19 (11), 1441-1442 (2003)
MEDLINE 22755829
PUBMED 12874060
REFERENCE 2

AUTHORS Rosso, M.G., Li, Y., Strizhov, N., Reiss, B., Dekker, K. and Weisshaar, B.
TITLE An Arabidopsis thaliana T-DNA mutagenized population (GABI-Kat) for flanking sequence tag-based reverse genetics

JOURNAL Plant Mol. Biol. 53 (1-2), 247-259 (2003)
MEDLINE 23117147
PUBMED 14756321
REFERENCE 3

AUTHORS Strizhov, N., Li, Y., Rosso, M.G., Viehoveer, P., Dekker, K. A. and Weisshaar, B.
TITLE High-throughput generation of sequence indexes from T-DNA mutagenized Arabidopsis thaliana lines

JOURNAL Biotechniques 35 (6), 1164-1168 (2003)
MEDLINE 14682050
PUBMED 14682050
REFERENCE 4 (bases 1 to 40)

AUTHORS Li, Y., Rosso, M.G., Strizhov, N. and Weisshaar, B.
TITLE Direct Submission
JOURNAL Submitted (31-MAR-2004) Weisshaar B., Max-Planck-Institut fuer Zuechtungsforchung, Carl-von-Linne-Weg 10, Koeln, 50829, Germany

COMMENT This sequence has been recovered from the left border of the T-DNA. It indicates an insertion within the locus defined by BAC clone MZF18. Details on the protocols used for generation of the sequence are described in References 1-3. The sequences are generated at the MPI for Plant Breeding Research in the context of the GABI-Kat project. GABI-Kat is part of the German Plant Genomics program designated 'GABI'. Information on line availability can be found at: <http://www.mpiz-koeln.mpg.de/GABI-Kat/>.

FEATURES
source
1. .40
Location/Qualifiers
/organism="Arabidopsis thaliana"
/mol_type="genomic DNA"
/strain="Columbia 0"
/db_xref="taxon:3702"
/clone="GK-653E07-022839"
/clone_lib="Arabidopsis thaliana T-DNA insertion lines"
/scotypes="Col-0"
/notes="PCR was performed on DNA from Arabidopsis thaliana plants (T1) which were transformed with the T-DNA from vector PAC161 (GenBank accession number: AJ537514). The lines contain one or more T-DNA insertions. The DNA fragment(s) resulting from the PCR were directly sequenced to determine the genomic sequence flanking the insertion. T-DNA derived sequences were removed."

ORIGIN
Query Match 68.0%; Score 6.8; DB 9; Length 40;
Best Local Similarity 66.7%; Pred. No. 4.6e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: |||||
Db 26 AACGGTTCG 18

RESULT 27
CL523373
LOCUS
DEFINITION DAL2H04 Flanking Sequence Tag of Oryza sativa T-DNA insertion lines
Oryza sativa (japonica cultivar-group) genomic, genomic survey
sequence.

ACCESSION CL523373
VERSION CL523373.1 GI:46150173
KEYWORDS GSS.

ORGANISM Oryza sativa (japonica cultivar-group)
Oryza sativa (japonica cultivar-group)
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae;
Ehrhartoideae; Oryzaceae; Oryza.

REFERENCE 1 (bases 1 to 40)
AUTHORS Sallaud,C., Gay,C., Larmande,P., Bes,M., Piffanelli,P., Piegue,B.,
Droc,G., Regad,F., Bourgeois,E., Meynard,D., Perin,C.,
Guesquiere,A., Deiseny,M., Glaszmann,J.C. and Guiderdoni,E.
TITLE High throughput T-DNA insertion mutagenesis in rice: A first step
towards in silico reverse genetics

JOURNAL Plant J. (2004) In press
COMMENT Contact: Guiderdoni
UMR PIA Biotrop program
CIRAD
TA 40/03 ave Agropolis 34398 Montpellier cedex 5 FRANCE
Tel: 33467615629
Fax: 33467615605
Email: emmanuel.guiderdoni@cirad.fr
Class: TDNA tagged.

FEATURES
source
1..40
Location/Qualifiers
/organism="Oryza sativa (japonica cultivar-group)"
/mol_type="genomic DNA"
/cultivar="Nipponbare"
/db_xref="taxon:39947"
/clone_lib="Flanking Sequence Tag of Oryza sativa T-DNA
insertion lines"
/note="PCR was performed on DNA of primary transformants
of Oryza sativa plants. The DNA fragment(s) resulting of
PCR were directly sequenced from the left border to
determine the genomic sequence flanking the insertion.
T-DNA derived sequences were removed. Information to order
the corresponding mutant line and a link to a database
providing a graphical display is available from June 2004
at <http://genoplante-info.infobiogen.fr/oryzatagline/>.
This sequence has been generated in the framework of the
French plant genomics program Genoplante
(<http://www.genoplante.org> and
<http://genoplante-info.infobiogen.fr>)."

ORIGIN
Query Match 68.0%; Score 6.8; DB 9; Length 40;
Best Local Similarity 66.7%; Pred. No. 4.6e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: |||||
Db 24 GACCGTTCG 32

RESULT 28
AJ746715
LOCUS
DEFINITION AJ746715 muscle - muscle minus alveolar macrophage Sus scrofa cDNA
clone ap03_6_D02, mRNA sequence.

ACCESSION AJ746715
VERSION AJ746715.1 GI:49916774
KEYWORDS EST.

SOURCE Sus scrofa (pig)
ORGANISM Sus scrofa
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Cetartiodactyla; Suina; Suidae; Sus.
REFERENCE 1 (bases 1 to 41)
AUTHORS Hopwood,P.A., Zhang,F., Lowden,S., Talbot,R., Burt,D., Archibald,A.
and Dixon,L.
TITLE Development of a porcine cDNA microarray
JOURNAL Unpublished (2004)
COMMENT Contact: Hopwood PA
Dept. of Preclinical Veterinary Sciences
Royal School for Veterinary Studies
Summerhall, Edinburgh, EH9 1QH, UNITED KINGDOM
Sequencing was performed by ARK Genomics. This clone is available
from ARK- Genomics, Roslin Institute, Roslin, Midlothian EH25 9PS,
UK. See www.ark-genomics.org or contact info@arkgenomics.org.

FEATURES
source
1..41
Location/Qualifiers
/organism="Sus scrofa"
/mol_type="mRNA"
/db_xref="taxon:9823"
/clone="ap03_6_D02"
/tissue_type="muscle"
/cell_type="macrophage"
/clone_lib="muscle - muscle minus alveolar macrophage"

ORIGIN
Query Match 68.0%; Score 6.8; DB 1; Length 41;
Best Local Similarity 66.7%; Pred. No. 4.6e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: |||||
Db 5 AACGGTCG 13

RESULT 29
BH849732/c
LOCUS BH849732
DEFINITION 41 bp DNA linear GSS 13-JUN-2002
SALK_070215.23.95.x Arabidopsis thaliana TDNA insertion lines
Arabidopsis thaliana genomic clone SALK_070215.23.95.x, genomic
survey sequence.

ACCESSION BH849732
VERSION BH849732.1 GI:21420603
KEYWORDS GSS.
SOURCE Arabidopsis thaliana (thale cress)
ORGANISM Arabidopsis thaliana
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots;
rosids; eurosids II; Brassicales; Brassicaceae; Arabidopsis.
REFERENCE 1 (bases 1 to 41)
AUTHORS Alonso,J.M.; Leisse,T.J.; Barajas,P.; Chen,H.; Cheuk,R.;
Gadrinab,C.; Jeske,A.; Karnes,M.; Kim,C.J.; Parker,H.; Prednis,L.;
Shinn,P.; Zimmerman,J. and Ecker,J.R.
TITLE A Sequence-Indexed Library of Insertion Mutations in the
Arabidopsis Genome
JOURNAL Unpublished (2001)
COMMENT Contact: Joseph R. Ecker
Salk Institute Genomic Analysis Laboratory (SIGNAL)
The Salk Institute for Biological Studies
10010 N. Torrey Pines Road, La Jolla, CA 92037, USA
Tel: 858 453 4100 x1752
Fax: 858 558 6379
Email: ecker@salk.edu
This is single pass sequence recovered from the left border of
TDNA. This sequence lies within an annotated exon of At2g26190.
Class: TDNA tagged.

FEATURES
source
1..41
Location/Qualifiers
/organism="Arabidopsis thaliana"
/mol_type="genomic DNA"
/ecotype="Col-0"
/db_xref="taxon:3702"

/clone="SALK_070215.23.95.x"
 /clone_lib="Arabidopsis thaliana TDNA insertion lines"
 /note="PCR was performed on Arabidopsis thaliana lines
 each of which contains one or more TDNA insertion
 elements. The resultant fragment for each line was
 directly sequenced to determine the genomic sequence at
 the site of insertion. Details of the protocols used can
 be found at http://signal.salk.edu/tdna_protocols.html"

ORIGIN

Query Match 68.0%; Score 6.8; DB 8; Length 41;
 Best Local Similarity 66.7%; Pred. No. 4.6e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
 : ||: |||
 Db 17 AAGCGTTCG 9

RESULT 30

CL518209/c
 LOCUS
 DEFINITION
 Oryza sativa (japonica cultivar-group) genomic, genomic survey
 sequence.

ACCESSION
 VERSION
 KEYWORDS
 SOURCE
 ORGANISM

Oryza sativa (japonica cultivar-group)
 Oryza sativa (japonica cultivar-group)
 Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;

Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae;
 Ehrhartoideae; Oryzaceae; Oryza.
 1 (bases 1 to 41)

REFERENCE

AUTHORS
 Sallaud, C., Gay, C., Larmande, P., Beg, M., Piffanelli, P., Plegu, B.,
 Droc, G., Regad, F., Bourgeois, E., Meynard, D., Perin, C.,
 Ghesquiere, A., Delsen, M., Glaszmann, J.C. and Guiderdoni, E.
 High throughput T-DNA insertion mutagenesis in rice: A first step
 towards in silico reverse genetics

JOURNAL

COMMENT

Contact: Guiderdoni
 UMR PIA Biotrop program
 CIRAD
 TA 40/03 ave Agropolis 34398 Montpellier cedex 5 FRANCE
 Tel: 33467615629
 Fax: 33467615605
 Email: emmanuel.guiderdoni@cirad.fr
 Class: TDNA tagged.

FEATURES

Location/Qualifiers

1..41
 /organism="Oryza sativa (japonica cultivar-group)"

/mol_type="genomic DNA"

/cultivar="Nipponbare"

/db_xref="taxon:39947"

/clone_lib="Planking Sequence Tag of Oryza sativa T-DNA
 insertion lines"

/note="PCR was performed on DNA of primary transformants
 of Oryza sativa plants. The DNA fragment(s) resulting of
 PCR were directly sequenced from the left border to
 determine the genomic sequence flanking the insertion.
 T-DNA derived sequences were removed. Information to order
 the corresponding mutant line and a link to a database
 providing a graphical display is available from June 2004
 at <http://genoplante-info.infobiogen.fr/oryzatagline/>.
 This sequence has been generated in the framework of the
 French plant genomics program Genoplante
 (<http://www.genoplante.org> and
<http://genoplante-info.infobiogen.fr>).

ORIGIN

Query Match 68.0%; Score 6.8; DB 9; Length 41;
 Best Local Similarity 66.7%; Pred. No. 4.6e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
 : ||: |||
 Db 38 GAGCGGTCG 30

RESULT 31

CL705789/c
 LOCUS

DEFINITION

lines Drosophila melanogaster genomic sequence recovered from 5'

end of P element, genomic survey sequence.

ACCESSION

VERSION

KEYWORDS

SOURCE

ORGANISM

Drosophila melanogaster (fruit fly)

Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;

Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha;

Ephydroidea; Drosophilidae; Drosophila.

1 (bases 1 to 41)

AUTHORS

Levis, R., Hoskins, R., Liao, G., Mozden, N., Tsang, G., He, Y.,

Karpen, G., Bellien, H., Rubin, G. and Spradling, A.

The Berkeley Drosophila Genome Project Gene Disruption Project

Unpublished (2001)

COMMENT

Contact: Gerald Rubin

Berkeley Drosophila Genome Project

University of California, Berkeley

LSA Building, Berkeley, CA 94720-3200, USA

Fax: 5106439947

Email: gerry@fruitfly.berkeley.edu

Sequence recovery method was inverse PCR.

Sequence orientation is forward strand relative to 5' end of P

element

The P element insertion position is base 34 in the 41 bases. This

insertion position refers to the first base of the 8 base target

recognition sequence.

Class: transposon-tagged.

Location/Qualifiers

1..41

/organism="Drosophila melanogaster"

/mol_type="genomic DNA"

/db_xref="taxon:7227"

/clone_lib="Drosophila melanogaster P{EPGy2} P element
 insertion lines"

/note="Inverse PCR was performed on Drosophila
 melanogaster strains each of which contains one or more
 P{EPGy2} P-element transposon insertion. The resultant
 fragment for each strain was directly sequenced to
 determine the genomic sequence at the site of insertion.
 Details of the protocols used can be found at
<http://www.fruitfly.org/about/methods/inverse.pcr.html>."

Query Match 68.0%; Score 6.8; DB 9; Length 41;
 Best Local Similarity 66.7%; Pred. No. 4.6e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
 : ||: |||
 Db 22 TAACGGTCG 14

RESULT 32

CO788022

LOCUS

DEFINITION

NT003A.C09 St18-22 Neural tube (NT) Ambystoma mexicanum cDNA 5',
 similar to hypothetical protein, mRNA sequence.

ACCESSION

VERSION

KEYWORDS

SOURCE

ORGANISM

Ambystoma mexicanum (axolotl)

EST.

CO788022.1 GI:51003993

Ambystoma mexicanum

CO788022

EST.

Ambystoma mexicanum

CO788022

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Amphibia; Batrachia; Caudata; Salamandroidea; Ambystomidae; Ambystoma.

1 (bases 1 to 42)

REFERENCE
AUTHORS Habermann, B., Beblin, A.G., Herklotz, S., Volkmer, M., Eckelt, K., Fehlike, K., Epperlein, H.H., Schackert, H.K., Wiebe, G. and Tanaka, E.M.
TITLE An Ambystoma mexicanum EST sequencing project: Analysis of 17,352 expressed sequence tags from embryonic and regenerating blastema cDNA libraries

JOURNAL
COMMENT Genome Biol. (2004) In press
 Contact: Ely M. Tanaka
 Tanaka Lab
 Max Planck Institute of Molecular Cell Biology and Genetics, Dresden
 Pfothenauerstrasse 108, 01307 Dresden, Germany
 Tel: 0049 351 210 2620
 Fax: 0049 351 210 1489
 Email: tanaka@mpi-cbg.de
 Plate: NT003A row: 09 column: C
 Seq primer: GCA CAT TAG GCC TAT TTA GGT GAC A.

FEATURES
 Location/Qualifiers
 1..42
 /organism="Ambystoma mexicanum"
 /mol_type="mRNA"
 /db_xref="taxon:8296"
 /tissue_type="Neural Tube, Notochord, Somites"
 /cell_type="Includes Neural tube, notochord, somites"
 /dev_stage="Stage 18-22"
 /clone_lib="St18-22 Neural tube (NT)"
 /note="Vector: pCMVSPORT6; Site 1: NotI; Site 2: SalI; Unnormalized cDNA plasmid library prepared by Invitrogen. Size fractionated mRNA was polydT primed and cloned into NotI-SalI site of pCMVSPORT6. Bacterial host is EMDH10B-TONA. Average insert size is 1.5 KB.
 TAG_LIB=NT"

ORIGIN

Query Match 68.0%; Score 6.8; DB 7; Length 42;
 Best Local Similarity 66.7%; Pred. No. 4.6e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
 :|||:||||
Db 1 TACCGCTCG 9

RESULT 33
LOCUS BF114596
DEFINITION BF114596 43 bp mRNA linear EST 23-OCT-2000
 SWOVAFCAP48G11SK Onchocerca volvulus adult female cDNA
 mRNA sequence.

ACCESSION
VERSION BF114596
KEYWORDS EST.

SOURCE
ORGANISM Onchocerca volvulus
 Eukaryota; Metazoa; Nematoda; Chromadorea; Spirurida; Filarioidea; Onchocercidae; Onchocerca.

REFERENCE
AUTHORS Lizotte-Waniewski, M. and Williams, S.A.
TITLE Genes expressed in adult female stage of Onchocerca volvulus
JOURNAL Unpublished (1998)
COMMENT Contact: Steven A. Williams
 Molecular Parasitology
 Smith College Department of Biological Sciences
 Department of Biological Sciences, Clark Science Center, Smith College, Northampton, MA, 01063, USA
 Tel: 4135853826
 Fax: 4135853786
 Email: genome@smith.edu
 Seq primer: pBluescript SK.

FEATURES
 Location/Qualifiers

1..43
 /organism="Onchocerca volvulus"
 /mol_type="mRNA"
 /db_xref="taxon:6282"
 /clone="SWOVAFCAP48G11"
 /sex="female"
 /dev_stage="adult"
 /lab_host="XL1-Blue MRF"
 /clone_lib="Onchocerca volvulus adult female cDNA (SAW98MLW-OVAF)"

ORIGIN

Query Match 68.0%; Score 6.8; DB 2; Length 43;
 Best Local Similarity 66.7%; Pred. No. 4.5e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
 :|||:||||
Db 4 TACCGCTCG 12

RESULT 34
LOCUS BI830843
DEFINITION BI830843 603080959F1 NIH_MGC_119 Homo sapiens cDNA clone IMAGE:5172495 5',
 mRNA sequence.

ACCESSION
VERSION BI830843.1 GI:15942393
KEYWORDS EST.

SOURCE
ORGANISM Homo sapiens (human)
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE
AUTHORS NIH-MGC http://mgc.nci.nih.gov/.
TITLE National Institutes of Health, Mammalian Gene Collection (MGC)
JOURNAL Unpublished (1999)
COMMENT Contact: Robert Strausberg, Ph.D.
 Email: cgapbs-r@mail.nih.gov
 Tissue Procurement: Life Technologies, Inc.
 cDNA Library Preparation: Life Technologies, Inc.
 cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
 DNA Sequencing by: Incyte Genomics, Inc.
 Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:
 http://image.llnl.gov
 Plate: LLAM11429 row: f column: 16
 High quality sequence start: 3
 High quality sequence stop: 43.
 Location/Qualifiers

FEATURES
 1..43
 /organism="Homo sapiens"
 /mol_type="mRNA"
 /db_xref="taxon:9606"
 /clone="IMAGE:5172495"
 /tissue_type="medulla"
 /lab_host="DH10B"
 /clone_lib="NIH_MGC_119"
 /note="Organ: brain; Vector: pCMV-SPORT6; Site 1: NotI; Site 2: EcoRV (destroyed); RNA source normal medulla from anonymous male age 27. Library is oligo-dT primed and directionally cloned (EcoRV site is destroyed upon

cloning). Average insert size 1.3 kb, insert size range 0.9-3 kb. Library is normalized and enriched for full-length clones and was constructed by C. Gruber (Invitrogen). Research Genetics tracking code 013. Note: this is a NIH_MGC Library."

ORIGIN

Query Match 68.0%; Score 6.8; DB 4; Length 43;
 Best Local Similarity 66.7%; Pred. No. 4.5e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 2 DANCCKTCG 10
 :|||:|
 Db 6 GAGCGGTCG 14

RESULT 35
 AL949027/c
 LOCUS 43 bp DNA linear GSS 02-APR-2004
 DEFINITION Arabidopsis thaliana T-DNA flanking sequence GK-317C11-015854,
 genomic survey sequence.

ACCESSION AL949027
 VERSION AL949027.1 GI:24405649
 KEYWORDS GSS.

SOURCE Arabidopsis thaliana (thale cress)

ORGANISM Arabidopsis thaliana

REFERENCE 1
 AUTHORS Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
 TITLE Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots;
 rosids; eurosids II; Brassicales; Brassicaceae; Arabidopsis.

REFERENCE 2
 AUTHORS Li, Y., Rosso, M.G., Strizhov, N., Viehoever, P. and Weishaar, B.
 TITLE GABI-Kat Simplesearch: a flanking sequence tag (FST) database for
 the identification of T-DNA insertion mutants in Arabidopsis
 thaliana

JOURNAL Bioinformatics 19 (11), 1441-1442 (2003)

MEDLINE 22755829

PUBMED 12874060

REFERENCE 3

AUTHORS Rosso, M.G., Li, Y., Strizhov, N., Reiss, B., Dekker, K. and
 Weishaar, B.

TITLE An Arabidopsis thaliana T-DNA mutagenized population (GABI-Kat) for
 flanking sequence tag-based reverse genetics

JOURNAL Plant Mol. Biol. 53 (1-2), 247-259 (2003)

MEDLINE 23117147

PUBMED 14756321

REFERENCE 4

AUTHORS Strizhov, N., Li, Y., Rosso, M.G., Viehoever, P., Dekker, K.A. and
 Weishaar, B.

TITLE High-throughput generation of sequence indexes from T-DNA
 mutagenized Arabidopsis thaliana lines

JOURNAL Biotechniques 35 (6), 1164-1168 (2003)

PUBMED 14682050

REFERENCE 5

AUTHORS Rosso, M.G., Li, Y., Strizhov, N. and Weishaar, B.

TITLE Direct Submission

JOURNAL Submitted (31-MAR-2004) Weishaar B., Max-Planck-Institut fuer
 Zuechtungsforchung, Carl-von-Linne-Weg 10, Koeln, 50829, Germany

COMMENT This sequence has been recovered from the left border of the T-DNA.
 It indicates an insertion within the locus defined by BAC clone
 F15H11. Details on the protocols used for generation of the
 sequence are described in References 1-3. The sequences are
 generated at the MPI for Plant Breeding Research in the context of
 the GABI-Kat project. GABI-Kat is part of the German Plant Genomics
 program designated 'GABI'. Information on line availability can be
 found at: <http://www.mpiz-koeln.mpg.de/GABI-Kat/>.

FEATURES

source

1. .43

/organism="Arabidopsis thaliana"

/mol_type="genomic DNA"

/strain="Columbia 0"

/db_xref="taxon:3702"

/clone_lib="Arabidopsis thaliana T-DNA insertion lines"

Location/Qualifiers

1. .43

/organism="Arabidopsis thaliana"

/mol_type="genomic DNA"

/strain="Columbia 0"

/db_xref="taxon:3702"

/clone_lib="Arabidopsis thaliana T-DNA insertion lines"

Location/Qualifiers

1. .43

/organism="Arabidopsis thaliana"

/mol_type="genomic DNA"

/strain="Columbia 0"

/db_xref="taxon:3702"

/clone_lib="Arabidopsis thaliana T-DNA insertion lines"

Location/Qualifiers

/ecotype="Col-0"

/note="PCR was performed on DNA from Arabidopsis thaliana
 plants (Ti) which were transformed with the T-DNA from
 vector pAC161 (GenBank accession number: AJ537514). The
 lines contain one or more T-DNA insertions. The DNA
 fragment(s) resulting from the PCR were directly sequenced
 to determine the genomic sequence flanking the insertion.
 T-DNA derived sequences were removed."

ORIGIN

Query Match 68.0%; Score 6.8; DB 9; Length 43;

Best Local Similarity 66.7%; Pred. No. 4.5e+05;

Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 2 DANCCKTCG 10

:|||:|

Db 34 TATCGGTCG 26

RESULT 36

CD746851

LOCUS 44 bp mRNA linear EST 25-JUN-2004

DEFINITION S12_D08_S12_063.abi Sugar-fed (S) An.gam. 30 hr Abdomen Library

ACCESSION CD746851

VERSION CD746851.1 GI:49251047

KEYWORDS EST.

SOURCE Anopheles gambiae (African malaria mosquito)

ORGANISM Anopheles gambiae

REFERENCE 1 (bases 1 to 44)

AUTHORS Dana, A.N., Lobo, N.F., Hillemeier, M.E. and Collins, F.H.

TITLE Hematophagy-associated gene expression patterns in adult female

JOURNAL Anopheles gambiae mosquitoes

COMMENT Unpublished (2003)

CONTACT: Dana A.N.

UNIVERSITY OF NOTRE DAME

CENTER FOR TROPICAL DISEASE RESEARCH AND TRAINING, DEPT. OF BIOL.

SCI., NOTRE DAME, IN 46556, USA

TEL: 574 - 631 - 3241

FAX: 574 - 631 - 3996

EMAIL: adana@nd.edu

PCR PRIMERS

FORWARD: ctgggaagcgccattgtgttg

BACKWARD: atagactactatagggcaattggc

SEQ PRIMER: ctgggaagcgccattgtgttg

FEATURES

source

1. .44

/organism="Anopheles gambiae"

/mol_type="mRNA"

/strain="4Arr"

/db_xref="taxon:7165"

/sex="female"

/tissue_type="Abdomens"

/dev_stage="Female adult 5-7 days post eclosion"

/lab_host="E. coli XLI-Blue"

/clone_lib="Sugar-fed (S) An.gam. 30 hr Abdomen Library"

/notes="Vector: lambdaTriplex2 (Clontech); Site 1: Sfi IA;

Site 2: Sfi IB; Sugar-fed adult female An. gambiae

mosquitoes were flash frozen after a 30 hour incubation of

adult mosquitoes at 19 degrees Celsius. Total RNA

extracted from abdomens separated from remaining carcasses.

CDNA inserts >500 bp cloned directionally into ltrp1Ex2.

Sfi IA site is 5'. Non-normalized and Non-amplified

phagemid library. Single pass sequencing reactions from 5'

end."

ORIGIN

Query Match 68.0%; Score 6.8; DB 6; Length 44;

Best Local Similarity 66.7%; Pred. No. 4.5e+05;

Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: |||||

Db 19 TATCGTTTCG 27

RESULT 37
BH862329/c

LOCUS BH862329 44 bp DNA linear GSS 05-AUG-2002

DEFINITION SALK_089365 Arabidopsis thaliana TDNA insertion lines Arabidopsis thaliana genomic clone SALK_089365, genomic survey sequence.

ACCESSION BH862329

VERSION BH862329.1 GI:22097655

KEYWORDS GSS.

SOURCE Arabidopsis thaliana (thale cress)

ORGANISM Arabidopsis thaliana

REFERENCE 1 (bases 1 to 44)
Alonso,J.M., Leisse,T.J., Barajas,P., Chen,H., Cheuk,R., Gadrinab,C., Jeske,A., Karnes,M., Kim,C.J., Parker,H., Prednis,L., Shinn,P., Zimmermann,J. and Ecker,J.R.
A Sequence-Indexed Library of Insertion Mutations in the Arabidopsis Genome Unpublished (2001)

TITLE Arabidopsis thaliana

JOURNAL Arabidopsis thaliana

COMMENT Contact: Joseph R. Ecker
Salk Institute Genomic Analysis Laboratory (SIGNAL)
The Salk Institute for Biological Studies
10010 N. Torrey Pines Road, La Jolla, CA 92037, USA
Tel: 858 453 4100 x1752
Fax: 858 558 6379
Email: ecker@salk.edu
This is single pass sequence recovered from the left border of TDNA. This sequence lies within an annotated exon of Atg19840.
Class: TDNA tagged.

FEATURES
source Location/Qualifiers
1. .44
/organism="Arabidopsis thaliana"
/mol_type="genomic DNA"
/ecotype="Col-0"
/db_xref="taxon:3702"
/clone="SALK_089365"
/clone_lib="Arabidopsis thaliana TDNA insertion lines"
/note="PCR was performed on Arabidopsis thaliana lines each of which contains one or more TDNA insertion elements. The resultant fragment for each line was directly sequenced to determine the genomic sequence at the site of insertion. Details of the protocols used can be found at http://signal.salk.edu/tdna_protocols.html

ORIGIN
Query Match 68.0%; Score 6.8; DB 8; Length 44;
Best Local Similarity 66.7%; Pred. No. 4.5e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: |||||

Db 18 TAGCGGTCG 10

RESULT 38
BZ384007

LOCUS SALK_134916.16.65 x Arabidopsis thaliana TDNA insertion lines

DEFINITION Arabidopsis thaliana genomic clone SALK_134916.16.65 x, genomic survey sequence.

ACCESSION BZ384007

VERSION BZ384007.1 GI:25480865

KEYWORDS GSS.

SOURCE Arabidopsis thaliana (thale cress)

ORGANISM Arabidopsis thaliana

REFERENCE 1 (bases 1 to 44)
Alonso,J.M., Leisse,T.J., Barajas,P., Chen,H., Cheuk,R., Gadrinab,C., Jeske,A., Karnes,M., Kim,C.J., Parker,H., Prednis,L., Shinn,P., Zimmermann,J. and Ecker,J.R.
A Sequence-Indexed Library of Insertion Mutations in the Arabidopsis Genome Unpublished (2001)

TITLE Arabidopsis thaliana

JOURNAL Arabidopsis thaliana

COMMENT Contact: Joseph R. Ecker
Salk Institute Genomic Analysis Laboratory (SIGNAL)
The Salk Institute for Biological Studies
10010 N. Torrey Pines Road, La Jolla, CA 92037, USA
Tel: 858 453 4100 x1752
Fax: 858 558 6379
Email: ecker@salk.edu
This is single pass sequence recovered from the left border of TDNA. This sequence lies within an annotated exon of At5g14680.
Class: TDNA tagged.

FEATURES
source Location/Qualifiers
1. .44
/organism="Arabidopsis thaliana"
/mol_type="genomic DNA"
/ecotype="Col-0"
/db_xref="taxon:3702"
/clone="SALK_134916.16.65.x"
/clone_lib="Arabidopsis thaliana TDNA insertion lines"
/note="PCR was performed on Arabidopsis thaliana lines each of which contains one or more TDNA insertion elements. The resultant fragment for each line was directly sequenced to determine the genomic sequence at the site of insertion. Details of the protocols used can be found at http://signal.salk.edu/tdna_protocols.html

ORIGIN
Query Match 68.0%; Score 6.8; DB 8; Length 44;
Best Local Similarity 66.7%; Pred. No. 4.5e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: |||||

Db 21 GATCGTTTCG 29

RESULT 39
BZ763112

LOCUS SALK_113490.32.00 x Arabidopsis thaliana TDNA insertion lines

DEFINITION Arabidopsis thaliana genomic clone SALK_113490.32.00.x, genomic survey sequence.

ACCESSION BZ763112

VERSION BZ763112.1 GI:28935665

KEYWORDS GSS.

SOURCE Arabidopsis thaliana (thale cress)

ORGANISM Arabidopsis thaliana

REFERENCE 1 (bases 1 to 44)
Alonso,J.M., Leisse,T.J., Barajas,P., Chen,H., Cheuk,R., Gadrinab,C., Jeske,A., Karnes,M., Kim,C.J., Parker,H., Prednis,L., Shinn,P., Zimmermann,J. and Ecker,J.R.
A Sequence-Indexed Library of Insertion Mutations in the Arabidopsis Genome Unpublished (2001)

TITLE Arabidopsis thaliana

JOURNAL Arabidopsis thaliana

COMMENT Contact: Joseph R. Ecker
Salk Institute Genomic Analysis Laboratory (SIGNAL)
The Salk Institute for Biological Studies
10010 N. Torrey Pines Road, La Jolla, CA 92037, USA
Tel: 858 453 4100 x1752
Fax: 858 558 6379
Email: ecker@salk.edu

This is single pass sequence recovered from the left border of TDNA. This sequence lies within an annotated exon of At3g48320. Class: TDNA tagged.

FEATURES

source
1. .44
/organism="Arabidopsis thaliana"
/mol_type="genomic DNA"
/db_xref="taxon:3702"
/clone_lib="Arabidopsis thaliana TDNA insertion lines"
/note="PCR was performed on Arabidopsis thaliana lines each of which contains one or more TDNA insertion elements. The resultant fragment for each line was directly sequenced to determine the genomic sequence at the site of insertion. Details of the protocols used can be found at http://signal.salk.edu/tdna_protocols.html"

ORIGIN

Query Match 68.0%; Score 6.8; DB 8; Length 44;
Best Local Similarity 66.7%; Pred. No. 4.5e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10

Db 2 AACCGTCG 10

RESULT 40

AJ622569

LOCUS

DEFINITION Drosophila melanogaster flanking sequence of RS P element insertion P[RS5]5-HA-2912, clone library P[RS5], genomic survey sequence.

ACCESSION

AJ622569

VERSION

GSS; genome survey sequence.

KEYWORDS

Drosophila melanogaster

ORGANISM

Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota; Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha; Ephydroidea; Drosophilidae; Drosophila.

REFERENCE

1

AUTHORS

Ryder, E.J., Ashburner, M., Bagunya, J., Blows, F., Bucheton, A., Coulson, D., Dickson, B., Drummond, J., Glover, D., Gunton, N., Hafen, E., Hall, S., Heisenberg, M., Lepesant, J.A., Maroy, P., Mechler, B., O'Kane, C., Pflugfelder, G., Rasmuson-Lestander, A., Reuter, G., Roote, J., Szidonyi, J., Wang, S., Webster, J. and Russell, S.

TITLE Mapping of RS P element insertions in Drosophila melanogaster for the Drosbel second generation deficiency kit

JOURNAL

Unpublished

REFERENCE

2 (bases 1 to 44)

AUTHORS

Ryder, E.J.

TITLE

Direct Submission

JOURNAL

Submitted (19-JAN-2004)

University of Cambridge, Downing Street, CB233SH, UNITED KINGDOM

COMMENT

The insertion point of the P element is before base 1 of the sequence. Further information about this P element insertion line can be found at <http://www.flyseq.org.uk> and <http://www.drosdel.org.uk>.

FEATURES

source

1. .44

/organism="Drosophila melanogaster"

/mol_type="genomic DNA"

/db_xref="taxon:7227"

/chromosome="3R"

/clone_lib="P[RS5]5-HA-2912"

/note="read=5' end"

misc_feature

1. .44

/note="P element insertion in the 3' to 5' orientation"

ORIGIN

Query Match

Best Local Similarity 66.7%;

Matches 6; Conservative 2;

Indels 0; Gaps 0;

QY 2 DANCCKTCG 10

Db 32 AACCGTCG 40

RESULT 41

BX001971

LOCUS

DEFINITION Arabidopsis thaliana T-DNA flanking sequence GK-360D04-016880, genomic survey sequence.

ACCESSION

BX001971

VERSION

BX001971.1 GI:26186931

KEYWORDS

GSS; Arabidopsis thaliana (thale cress)

ORGANISM

Arabidopsis thaliana

Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; rosids; eustosids II; Brassicales; Brassicaceae; Arabidopsis.

REFERENCE

1

AUTHORS

Li, Y., Rosso, M.G., Strizhov, N., Viehoveer, P. and Weissshaar, B.

TITLE

GABI-Kat SimpleSearch: a flanking sequence tag (FST) database for the identification of T-DNA insertion mutants in Arabidopsis thaliana

JOURNAL

Bioinformatics 19 (11), 1441-1442 (2003)

MEDLINE

22755829

PUBMED

12874060

REFERENCE

2

AUTHORS

Rosso, M.G., Li, Y., Strizhov, N., Reiss, B., Dekker, K. and Weissshaar, B.

TITLE

An Arabidopsis thaliana T-DNA mutagenized population (GABI-Kat) for flanking sequence tag-based reverse genetics

JOURNAL

Plant Mol. Biol. 53 (1-2), 247-259 (2003)

MEDLINE

23117147

PUBMED

14756321

REFERENCE

3

AUTHORS

Strizhov, N., Li, Y., Rosso, M.G., Viehoveer, P., Dekker, K.A. and Weissshaar, B.

TITLE

High-throughput generation of sequence indexes from T-DNA mutagenized Arabidopsis thaliana lines

JOURNAL

Biotechniques 35 (6), 1164-1168 (2003)

PUBMED

14682050

REFERENCE

4 (bases 1 to 44)

AUTHORS

Rosso, M.G., Li, Y., Strizhov, N. and Weissshaar, B.

TITLE

Direct Submission

Submitted (31-MAR-2004)

Weissshaar B., Max-Planck-Institut fuer Zuechtungsforschung, Carl-von-Linne-Weg 10, Koeln, 50829, Germany

COMMENT

This sequence has been recovered from the left border of the T-DNA. It indicates an insertion within the locus defined by BAC clone MAB16. Details on the protocols used for generation of the sequence are described in References 1-3. The sequences are generated at the MPI for Plant Breeding Research in the context of the GABI-Kat project. GABI-Kat is part of the German Plant Genomics program designated 'GABI'. Information on line availability can be found at: <http://www.mpiz-koeln.mpg.de/GABI-Kat/>.

FEATURES

Location/Qualifiers

1. .44

/organism="Arabidopsis thaliana"

/mol_type="genomic DNA"

/strain="Columbia 0"

/db_xref="taxon:3702"

/clone_lib="Arabidopsis thaliana T-DNA insertion lines"

/note="PCR was performed on DNA from Arabidopsis thaliana plants (T1) which were transformed with the T-DNA from vector pAC161 (Genbank accession number: AJ537514). The lines contain one or more T-DNA insertions. The DNA fragment(s) resulting from the PCR were directly sequenced to determine the genomic sequence flanking the insertion."

T-DNA derived sequences were removed."

```

ORIGIN
Query Match      68.0%; Score 6.8; DB 9; Length 44;
Best Local Similarity 66.7%; Pred. No. 4.5e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
    :|||:|
Db 32 AACGGTCG 40

RESULT 42
CC883620
LOCUS
DEFINITION
SALK_095315.31.60.x Arabidopsis thaliana TDNA insertion lines
Arabidopsis thaliana genomic clone SALK_095315.31.60.x, genomic
survey sequence.
ACCESSION
CC883620
VERSION
CC883620.1 GI:33359976
KEYWORDS
GSS:
SOURCE
Arabidopsis thaliana (thale cress)
ORGANISM
Arabidopsis thaliana
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots;
rosids; eurosids II; Brassicales; Brassicaceae; Arabidopsis.
REFERENCE
1 (bases 1 to 44)
AUTHORS
Alonso,J.M., Leisse,T.J., Barajas,P., Chen,H., Cheuk,R.,
Gadrinab,C., Jeske,A., Karnes,M., Kim,C.J., Parker,H., Prednis,L.,
Shinn,P., Zimmerman,J. and Ecker,J.R.
TITLE
A Sequence-Indexed Library of Insertion Mutations in the
Arabidopsis Genome
JOURNAL
Unpublished (2001)
COMMENT
Contact: Joseph R. Ecker
Salk Institute Genomic Analysis Laboratory (SIGNAL)
The Salk Institute for Biological Studies
10010 N. Torrey Pines Road, La Jolla, CA 92037, USA
Tel: 858 453 4100 x1752
Fax: 858 558 6379
Email: ecker@salk.edu
This is single pass sequence recovered from the left border of
TDNA.
Class: TDNA tagged.
Location/Qualifiers
1. .44
/organism="Arabidopsis thaliana"
/mol_type="genomic DNA"
/ecotype="Col-0"
/db_xref="taxon:3702"
/clone="SALK_095315.31.60.x"
/clone_lib="Arabidopsis thaliana TDNA insertion lines"
/note="PCR was performed on Arabidopsis thaliana lines
each of which contains one or more TDNA insertion
elements. The resultant fragment for each line was
directly sequenced to determine the genomic sequence at
the site of insertion. Details of the protocols used can
be found at http://signal.salk.edu/tdna_protocols.html"

ORIGIN
Query Match      68.0%; Score 6.8; DB 9; Length 44;
Best Local Similarity 66.7%; Pred. No. 4.5e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
    :|||:|
Db 32 AACGGTCG 40

RESULT 43
BZ384047
LOCUS
DEFINITION
SALK_134987.17.15.x Arabidopsis thaliana TDNA insertion lines
Arabidopsis thaliana genomic clone SALK_134987.17.15.x, genomic
survey sequence.
ACCESSION
BZ384047
VERSION
BZ384047.1 GI:25480947
KEYWORDS
GSS:
SOURCE
Arabidopsis thaliana (thale cress)
ORGANISM
Arabidopsis thaliana
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots;
rosids; eurosids II; Brassicales; Brassicaceae; Arabidopsis.
REFERENCE
1 (bases 1 to 45)
AUTHORS
Alonso,J.M., Leisse,T.J., Barajas,P., Chen,H., Cheuk,R.,
Gadrinab,C., Jeske,A., Karnes,M., Kim,C.J., Parker,H., Prednis,L.,
Shinn,P., Zimmerman,J. and Ecker,J.R.
TITLE
A Sequence-Indexed Library of Insertion Mutations in the
Arabidopsis Genome
JOURNAL
Unpublished (2001)
COMMENT
Contact: Joseph R. Ecker
Salk Institute Genomic Analysis Laboratory (SIGNAL)
The Salk Institute for Biological Studies
10010 N. Torrey Pines Road, La Jolla, CA 92037, USA
Tel: 858 453 4100 x1752
Fax: 858 558 6379
Email: ecker@salk.edu
This is single pass sequence recovered from the left border of
TDNA. This sequence lies within an annotated exon of At5g14680.
Class: TDNA tagged.
Location/Qualifiers
1. .45
/organism="Arabidopsis thaliana"
/mol_type="genomic DNA"
/ecotype="Col-0"
/db_xref="taxon:3702"
/clone="SALK_134987.17.15.x"
/clone_lib="Arabidopsis thaliana TDNA insertion lines"
/note="PCR was performed on Arabidopsis thaliana lines
each of which contains one or more TDNA insertion
elements. The resultant fragment for each line was
directly sequenced to determine the genomic sequence at
the site of insertion. Details of the protocols used can
be found at http://signal.salk.edu/tdna_protocols.html"

ORIGIN
Query Match      68.0%; Score 6.8; DB 8; Length 45;
Best Local Similarity 66.7%; Pred. No. 4.5e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
    :|||:|
Db 15 TATCGTTCG 23

RESULT 44
CF304811
LOCUS
DEFINITION
ABF1--06-A03.g1 ABF3-overexpressing transgenic rice lambda phage
CDNA library (ABF1) Oryza sativa (japonica cultivar-group) CDNA
clone ABF1--06-A03, mRNA sequence.
ACCESSION
CF304811
VERSION
CF304811.1 GI:33676572
KEYWORDS
EST.
SOURCE
Oryza sativa (japonica cultivar-group)
ORGANISM
Oryza sativa (japonica cultivar-group)
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae;
Ehrhartoideae; Oryzaceae; Oryza.
REFERENCE
1 (bases 1 to 46)
AUTHORS
Kim,J.S., Jun,K.M., Cheong,P.J., Kim,M.J., Lee,T.H., Shin,Y.C.,
Song,S.I., Kim,J.K., Kim,Y.-K. and Nahm,B.H.
TITLE
Large-scale Sequencing Analysis of Rice ESTs
JOURNAL
Unpublished (2003)
COMMENT
Contact: Nahm B.H.
Genomics and Genetics Institute, GreenGene Biotech Inc.; Division
of Bioscience and Bioinformatics, Myongji University

```

Yongin, Kyeonggi, Korea
Tel: 82 31 330 6193
Fax: 82 31 321 6355
Email: bnhahm@gbio.com, bnhahm@bio.myongji.ac.kr.

FEATURES

source

1. .46
/organism="Oryza sativa (japonica cultivar-group)"
/mol_type="mRNA"

/cultivar="Nackdong"

/db_xref="taxon:39947"

/clone="ABF1--06-A03"

/tissue_type="leaf"

/dev_stage="14 days after germination"

/lab_host="E.coli SOLR"

/clone_lib="ABF3-overexpressing transgenic rice lambda

/phage_cdna_library="(ABF1)"

/note="Vector: pBluescript SK(+); Site 1: EcoRI; Site 2:

XhoI; Leaf was dried for 2hrs. cDNA was inserted into

lambda Uni-ZAP XR vector at 5' end with EcoRI and 3' end

with XhoI site. mRNA was prepared from ABA-responsive

element binding transcription factor 3 overexpression

line."

ORIGIN

Query Match

Best Local Similarity 68.0%; Score 6.8; DB 7; Length 46;

Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10

:|||:||||

Db 20 GAACGTCG 28

RESULT 45

CF304811/c

LOCUS

DEFINITION

CF304811 ABF1--06-A03.g1 ABF3-overexpressing transgenic rice lambda phage

cdna library (ABF1) Oryza sativa (japonica cultivar-group) cdna

clone ABF1--06-A03, mRNA sequence.

ACCESSION

VERSION

CF304811.1 GI:33676572

KEYWORDS

EST.

SOURCE

ORGANISM

Oryza sativa (japonica cultivar-group)

Oryza sativa (japonica cultivar-group)

Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;

Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae;

Ehrhartoideae; Oryzoideae; Oryza.

1 (bases 1 to 46)

REFERENCE

AUTHORS

Kim, J.S., Jun, K.M., Cheong, P.J., Kim, M.J., Lee, T.H., Shin, Y.C.,

Song, S.I., Kim, J.K., Kim, Y.-K. and Nahm, B.H.

Large-scale Sequencing Analysis of Rice ESTs

Unpublished (2003)

CONTACT: Nahm B.H.

Genomics and Genetics Institute, GreenGene Biotech Inc.; Division

of Bioscience and Bioinformatics, Myongji University

Yongin, Kyeonggi, Korea

Tel: 82 31 330 6193

Fax: 82 31 321 6355

Email: bnhahm@gbio.com, bnhahm@bio.myongji.ac.kr.

FEATURES

source

1. .46

/organism="Oryza sativa (japonica cultivar-group)"

/mol_type="mRNA"

/cultivar="Nackdong"

/db_xref="taxon:39947"

/clone="ABF1--06-A03"

/tissue_type="leaf"

/dev_stage="14 days after germination"

/lab_host="E.coli SOLR"

/clone_lib="ABF3-overexpressing transgenic rice lambda

/phage_cdna_library="(ABF1)"

/note="Vector: pBluescript SK(+); Site 1: EcoRI; Site 2:

XhoI; Leaf was dried for 2hrs. cDNA was inserted into

line."

lambda Uni-ZAP XR vector at 5' end with EcoRI and 3' end
with XhoI site. mRNA was prepared from ABA-responsive
element binding transcription factor 3 overexpression
line."

ORIGIN

Query Match

Best Local Similarity 68.0%; Score 6.8; DB 7; Length 46;

Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10

:|||:||||

Db 27 GAACGTCG 19

RESULT 46

BZ383801

LOCUS

DEFINITION

BZ383801 46 bp DNA linear GSS 26-NOV-2002

SALK_134530.17.70.n Arabidopsis thaliana TDNA insertion lines

Arabidopsis thaliana genomic clone SALK_134530.17.70.n, genomic

survey sequence.

ACCESSION

VERSION

BZ383801.1 GI:25480372

KEYWORDS

SOURCE

ORGANISM

Arabidopsis thaliana (thale cress)

Arabidopsis thaliana

Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;

Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots;

Rosids; eurosids II; Brassicales; Brassicaceae; Arabidopsi.

1 (bases 1 to 46)

REFERENCE

AUTHORS

Alonso, J.M., Leisse, T.J., Barajas, P., Chen, H., Cheuk, R.,

Gadrinab, C., Jeske, A., Karnes, M., Kim, C.J., Parker, H., Prednis, L.,

Shinn, P., Zimmermann, J. and Ecker, J.R.

A Sequence-Indexed Library of Insertion Mutations in the

Arabidopsis Genome

Unpublished (2001)

CONTACT: Joseph R. Ecker

Salk Institute Genomic Analysis Laboratory (SIGNAL)

The Salk Institute for Biological Studies

10010 N. Torrey Pines Road, La Jolla, CA 92037, USA

Tel: 858 453 4100 x1752

Fax: 858 558 6379

Email: ecker@salk.edu

This is single pass sequence recovered from the left border of

TDNA. This sequence lies within an annotated exon of At5g14680.

Class: TDNA tagged.

FEATURES

Location/Qualifiers

1. .46

/organism="Arabidopsis thaliana"

/mol_type="genomic DNA"

/ecotype="Col-0"

/db_xref="taxon:3702"

/clone="SALK_134530.17.70.n"

/clone_lib="Arabidopsis thaliana TDNA insertion lines"

/note="PCR was performed on Arabidopsis thaliana lines

each of which contains one or more TDNA insertion

elements. The resultant fragment for each line was

directly sequenced to determine the genomic sequence at

the site of insertion. Details of the protocols used can

be found at http://signal.salk.edu/tdna_protocols.html"

ORIGIN

Query Match

Best Local Similarity 68.0%; Score 6.8; DB 8; Length 46;

Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10

:|||:||||

Db 17 GATCGTCG 25

RESULT 47

AG216853

LOCUS AG216853 46 bp DNA linear GSS 03-SEP-2002
DEFINITION Drosophila melanogaster DNA, clone.NP4651-5-1, flanking P[GawB] transposon insertion, genomic survey sequence.
ACCESSION AG216853
VERSION AG216853.1 GI:22763853
KEYWORDS GSS.
SOURCE Drosophila melanogaster (fruit fly)
ORGANISM Drosophila melanogaster
Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota; Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha; Ephydroidea; Drosophiliidae; Drosophila.

REFERENCE 1
AUTHORS Hayashi,S., Ito,K., Sado,Y., Taniguchi,M., Akimoto,A., Takeuchi,H., Aigaki,T., Matsuzaki,F., Nakagoshi,H., Tanimura,T., Ueda,R., Uemura,T., Yoshihara,M. and Goto,S.
TITLE GETDB, a database compiling expression patterns and molecular locations of a collection of Gal4 enhancer traps
JOURNAL Genesis (2002) In press
REFERENCE 2 (bases 1 to 46)
AUTHORS Hayashi,S.
TITLE Direct Submission
JOURNAL Submitted (27-AUG-2002) Shigeo Hayashi, RIKEN Center for Developmental Biology, Laboratory for Morphogenetic Signaling; Chuo-ku, Minatojima-minamimachi 2-2-3, Kobe, Hyogo 650-0047, Japan (E-mail:shayashi@cdb.riken.go.jp, Tel:81-78-301-3184, Fax:81-78-301-3183)
COMMENT This clone was isolated from genomic DNA flanking an insertion of the P element vector P[GawB] of a Drosophila strain.

FEATURES
source
1..46
/organism="Drosophila melanogaster"
/mol_type="genomic DNA"
/strain="NP4651"
/db_xref="taxon:7227"
/chromosome="2"
/map="23C3"
/clone="NP4651-5-1"
/note="flanking P[GawB] transposon insertion"

ORIGIN
Query Match 68.0%; Score 6.8; DB 9; Length 46;
Best Local Similarity 66.7%; Pred. No. 4.5e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: |||:|
Db 19 AATCGGTCG 27

RESULT 48
DMES46285/c
LOCUS DME546285 46 bp DNA linear GSS 24-FEB-2003
DEFINITION Drosophila melanogaster flanking sequence of RS P element insertion P[RS3]CB-5707-3, clone library P[RS3], genomic survey sequence.
ACCESSION AJ546285
VERSION AJ546285.1 GI:28554291
KEYWORDS GSS; genome survey sequence.
SOURCE Drosophila melanogaster (fruit fly)
ORGANISM Drosophila melanogaster
Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota; Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha; Ephydroidea; Drosophiliidae; Drosophila.

REFERENCE 1
AUTHORS Ryder,E.J., Ashburner,M., Bagunya,J., Blows,F., Bucheton,A., Coulson,D., Dickson,B., Drummond,J., Glover,D., Guntton,N., Hafen,E., Hall,S., Heisenberg,M., Lepesant,J.A., Maroy,P., Mechler,B., O'Kane,C., Pflugfelder,G., Rasmussen-Lestander,A., Reuter,G., Roote,J., Szidonya,J., Wang,S., Webster,J. and Russell,S.
TITLE Mapping of RS P element insertions in Drosophila melanogaster for the Drosdel second generation deficiency kit
JOURNAL Unpublished
REFERENCE 2 (bases 1 to 46)

AUTHORS Ryder,E.J.
TITLE Direct Submission
JOURNAL Submitted (17-FEB-2003) Ryder E.J., Department of Genetics, University of Cambridge, Downing Street, CB2 3EH, UNITED KINGDOM
COMMENT The insertion point of the P element is before base 1 of the sequence. Further information about this P element insertion line can be found at <http://www.flyseq.org.uk> and <http://www.drosdel.org.uk>.

FEATURES
source
1..46
/organism="Drosophila melanogaster"
/mol_type="genomic DNA"
/db_xref="taxon:7227"
/chromosome="3R"
/clone="P[RS3]CB-5707-3"
/clone_lib="P[RS3]"
/note="read=3' end"
misc_feature 1..46
/note="P element insertion in the 5' to 3' orientation"

ORIGIN
Query Match 68.0%; Score 6.8; DB 9; Length 46;
Best Local Similarity 66.7%; Pred. No. 4.5e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: |||:|
Db 24 AACGGTCG 16

RESULT 49
BES34847/c
LOCUS BES34847 47 bp mRNA linear EST 09-AUG-2000
DEFINITION 601231985F1 NCI_CGAP_Mam6 Mus musculus cDNA clone IMAGE:395869 5', mRNA sequence.
ACCESSION BES34847
VERSION BES34847.1 GI:9763492
KEYWORDS EST.
SOURCE Mus musculus (house mouse)
ORGANISM Mus musculus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.

REFERENCE 1 (bases 1 to 47)
AUTHORS NIH-MGC <http://mgc.nci.nih.gov/>.
TITLE National Institutes of Health, Mammalian Gene Collection (MGC) Unpublished (1999)
JOURNAL Contact: Robert Strausberg, Ph.D.
COMMENT Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Jeffrey Green M.D.
CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at: <http://image.llnl.gov>
Plate: L1AM8772 row: i column: 22
High quality sequence stop: 47.

FEATURES
source
1..47
/organism="Mus musculus"
/mol_type="mRNA"
/strain="FVB/N"
/db_xref="taxon:10090"
/clone="IMAGE:395869"
/sex="female, virgin"
/tissue type="infiltrating ductal carcinoma"
/dev stage="5 months"
/lab_host="DH10B"
/clone_lib="NCI_CGAP Mam6"
/note="Organ: mammary; Vector: pCMV-SPORT6; Site_1: SalI; Site_2: NotI; Cloned unidirectionally. Primer: Oligo dr. Library constructed by Life Technologies. Investigator providing samples: Jeffrey Green, M.D., NIH"

ORIGIN

Query Match 68.0%; Score 6.8; DB 2; Length 47;
 Best Local Similarity 66.7%; Pred. No. 4.5e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
 QY 2 DANCCKTCG 10
 Db 20 GACCGGTCG 12

RESULT 50
 H55083/c
 LOCUS
 DEFINITION CHR220022 Chromosome 22 exon Homo sapiens cDNA clone C22_33 5',
 mRNA sequence.

ACCESSION H55083
 VERSION H55083.1 GI:1107949

KEYWORDS EST.
 SOURCE Homo sapiens (human)

ORGANISM
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE
 1 (bases 1 to 47)
 AUTHORS Trofatter, J.A., Long, K.R., Murrell, J.R., Stotler, C.J., Gusella, J.F.
 and Buckler, A.J.

TITLE An expression-independent catalog of genes from human chromosome 22

JOURNAL Genome Res. 5 (3), 214-224 (1995)
 MEDLINE 96159527
 PUBMED 8593609

COMMENT
 Contact: Buckler AJ
 Molecular Neurogenetics Unit
 Massachusetts General Hospital
 Building 149, 13th St., Charlestown MA 02129
 Tel: 6177249616
 Fax: 6177265736
 Email: buckler@helix.mgh.harvard.edu
 Seq primer: T3.

FEATURES

source

1..47
 Location/Qualifiers
 /organism="Homo sapiens"
 /mol_type="mRNA"
 /db_xref="taxon:9606"
 /clone="C22_33"
 /lab_host="E. coli DH5a"
 /clone_lib="Chromosome 22 exon"
 /note="Vector: pBluescriptIIKS+; Site 1: Sal I; Site 2:
 Bam HI (destroyed); Exons were isolated from human
 chromosome 22 specific cosmids using a modification of
 the method of exon amplification (Proc. Natl. Acad. Sci.
 USA 88:4005-4009, 1991). Amplified exons were digested
 with Sal I and Bgl II and subsequently cloned into
 pBluescriptIIKS+ at the Sal I and Bam HI sites."

ORIGIN

Query Match 68.0%; Score 6.8; DB 7; Length 47;
 Best Local Similarity 66.7%; Pred. No. 4.5e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
 Db 38 GATCGGTCG 30

RESULT 51

A2615286
 LOCUS
 DEFINITION IM044106R Mouse 10kb plasmid UUGC1M library Mus musculus genomic
 clone UUGC1M044106 R, genomic survey sequence.

ACCESSION A2615286
 VERSION A2615286.1 GI:11737476
 KEYWORDS GSS.
 SOURCE Mus musculus (house mouse)

ORGANISM

Mus musculus

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Mus;

REFERENCE

AUTHORS

1 (bases 1 to 47)
 Dunn, D., Aoyagi, A., Barber, M., Beacorn, T., Duval, B., Hamil, C.,
 Islam, H., Longacre, S., Mahmoud, M., Meenen, E., Pedersen, T.,
 Reilly, M., Rose, R., Stokes, R., Tingey, A., von
 Niederhausern, A. and Wright, D. Weiss, R.

TITLE

JOURNAL

COMMENT

Mouse whole genome scaffolding with paired end reads from 10kb
 plasmid inserts
 Unpublished (2000)
 Contact: Robert B. Weiss
 University of Utah Genome Center
 University of Utah
 Rm. 308, Biomedical Polymers Research Bldg., 20 S. 2030 E., SLC, UT
 84112, USA

Tel: 801 585 5606
 Fax: 801 585 7177
 Email: ddunn@genetics.utah.edu

Insert length: 10000 Std Error: 0.00
 Plate: 0444 row: I column: 06

Seq primer: CACACAGAAACAGCTATGACC

Class: plasmid ends

High quality sequence stop: 47.

Location/Qualifiers

FEATURES

source

1..47
 /organism="Mus musculus"
 /mol_type="genomic DNA"
 /strain="C57BL/6J"
 /db_xref="taxon:10090"
 /clone="UUGC1M044106"
 /sex="Male"
 /lab_host="E. Coli strain XL10-Gold, TI-resistant, F-"
 /clone_lib="Mouse 10kb plasmid UUGC1M library"
 /note="Vector: PWD42nv; Purified genomic DNA from M.
 musculus C57BL/6J (male) was obtained from the Jackson
 Laboratory Mouse DNA Resource
 (http://www.jax.org/resources/documents/dnares/). The DNA
 was hydrodynamically sheared by repeated passage through a
 0.005 inch orifice at constant velocity. The sheared DNA
 was blunt end-repaired with T4 DNA polymerase and T4
 polynucleotide kinase. Adaptor oligonucleotides were
 ligated to the blunt ends in high molar excess. The
 adaptor DNA was purified and size-selected for a 9.5 to
 10.5 kb range using preparative agarose gel
 electrophoresis. Vector DNA was prepared from a derivative
 of pWD42 (gi|4732114|gb|AF129072.1), a copy-number
 inducible derivative of plasmid R1. The vector was ligated
 with adaptors complementary to the insert adaptors and
 purified. The sheared, adaptor mouse DNA was annealed to
 adaptor vector DNA, and transformed into
 chemically-competent E. coli XL10-Gold (Stratagene) cells
 and selected for ampicillin resistance."

ORIGIN

Query Match 68.0%; Score 6.8; DB 8; Length 47;
 Best Local Similarity 66.7%; Pred. No. 4.5e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
 Db 35 AATCGGTCG 43

RESULT 52

BH865116/c
 LOCUS
 DEFINITION SALK_097417 Arabidopsis thaliana TONA insertion lines Arabidopsis
 thaliana genomic clone SALK_097417, genomic survey sequence.

ACCESSION BH865116
 VERSION BH865116.1 GI:22101014
 KEYWORDS GSS.
 SOURCE Arabidopsis thaliana (thale cress)

```

ORGANISM Arabidopsis thaliana
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots;
rosids; eurosids II; Brassicales; Brassicaceae; Arabidopsids.
1 (bases 1 to 47)
REFERENCE Alonso,J.M., Leisse,T.J., Barajas,P., Chen,H., Cheuk,R.,
AUTHORS Gadrinab,C., Jeske,A., Karnes,M., Kim,C.J., Parker,H., Prednis,L.,
Shinn,P., Zimmerman,J. and Ecker,J.R.
TITLE A Sequence-Indexed Library of Insertion Mutations in the
Arabidopsis Genome
JOURNAL Unpublished (2001)
COMMENT Contact: Joseph R. Ecker
Salk Institute Genomic Analysis Laboratory (SIGnAL)
The Salk Institute for Biological Studies
10010 N. Torrey Pines Road, La Jolla, CA 92037, USA
Tel: 858 453 4100 x1752
Fax: 858 558 6379
Email: ecker@salk.edu
This is single pass sequence recovered from the left border of
TDNA. This sequence lies within an annotated exon of At3g57980.
Class: TDNA tagged
FEATURES Location/Qualifiers
source 1..47
/mol_type="genomic DNA"
/ecotype="Col-0"
/db_xref="taxon:3702"
/clone="SALK_097417"
/clone_lib="Arabidopsis thaliana TDNA insertion lines"
/notes="PCR was performed on Arabidopsis thaliana lines
each of which contains one or more TDNA insertion
elements. The resultant fragment for each line was
directly sequenced to determine the genomic sequence at
the site of insertion. Details of the protocols used can
be found at http://signal.salk.edu/tdna\_protocols.html"

ORIGIN
Query Match 58.0%; Score 6.8; DB 8; Length 47;
Best Local Similarity 66.7%; Pred. NO. 4.5e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGRKTCG 10
: |||||
Db 10 TAACGTTCG 2

RESULT 53
LOCUS BZ665531 47 bp DNA linear GSS 31-JAN-2003
DEFINITION EY00954-3prime Drosophila melanogaster P{EPgy2} P element insertion
lines Drosophila melanogaster genomic sequence recovered from 3'
end of P element, genomic survey sequence.
ACCESSION BZ665531 GI:28183314
VERSION BZ665531.1
KEYWORDS Drosophila melanogaster (fruit fly)
SOURCE Drosophila melanogaster
ORGANISM Drosophila melanogaster
Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha;
Ephydroidea; Drosophilidae; Drosophila.
1 (bases 1 to 47)
REFERENCE Lewis,R., Hoskins,R., Liao,G., Morzen,N., Tsang,G., He,Y.,
AUTHORS Karpen,G., Bellen,H., Rubin,G. and Spradling,A.
TITLE The Berkeley Drosophila Genome Project Gene Disruption Project
JOURNAL Unpublished (2001)
COMMENT Contact: Gerald Rubin
Berkeley Drosophila Genome Project
University of California, Berkeley
LSA Building, Berkeley, CA 94720-3200, USA
Fax: 5106433947
Email: gerry@fruitfly.berkeley.edu
Sequence recovery method was inverse PCR.
Sequence orientation is forward strand relative to 5' end of P

```

```

element
The P element insertion position is base 1 in the 47 bases. This
insertion position refers to the first base of the 8 base target
recognition sequence.
Class: transposon-tagged.
Location/Qualifiers
source 1..47
/organism="Drosophila melanogaster"
/mol_type="genomic DNA"
/db_xref="taxon:7227"
/clone_lib="Drosophila melanogaster P{EPgy2} P element
insertion lines"
/notes="Inverse PCR was performed on Drosophila
melanogaster strains each of which contains one or more
P{EPgy2} P-element transposon insertion. The resultant
fragment for each strain was directly sequenced to
determine the genomic sequence at the site of insertion.
Details of the protocols used can be found at
http://www.fruitfly.org/about/methods/inverse.pcr.html."

ORIGIN
Query Match 68.0%; Score 6.8; DB 8; Length 47;
Best Local Similarity 66.7%; Pred. NO. 4.5e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGRKTCG 10
: |||||
Db 13 AACCGTTCG 21

RESULT 54
LOCUS CG773973 47 bp DNA linear GSS 29-OCT-2003
DEFINITION 1123015F05.1EL_Y1 1123 - RescueMu Grid L Zea mays genomic, genomic
survey sequence.
ACCESSION CG773973 GI:38029528
VERSION CG773973.1
KEYWORDS Zea mays
SOURCE Zea mays
ORGANISM Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; PACCAD
clade; Panicoideae; Andropogoneae; Zea.
1 (bases 1 to 47)
REFERENCE Walbot,V.
AUTHORS Maize genomic sequences found using engineered RescueMu transposon
TITLE Unpublished (2001)
JOURNAL Department of Biological Sciences
COMMENT Stanford University
855 California Ave, Palo Alto, CA 94304, USA
Tel: 650 723 2227
Fax: 650 725 8221
Email: walbot@stanford.edu
Very probable ligation site of ends cut by single endonuclease.
Reverse complemented post-ligation sequence from source sequence.
Plate: 1123015 row: 7
Class: transposon-tagged.
Location/Qualifiers
source 1..47
/organism="Zea mays"
/mol_type="genomic DNA"
/cultivar="mixed background W23/A188/B73/K55"
/db_xref="taxon:4577"
/tissue_type="leaf"
/dev_stage="adult"
/lab_host="DH10B"
/clone_lib="1123 - RescueMu Grid L"
/notes="Organ: leaf; Vector: RescueMu (engineered from
pBluescript backbone); Site:1: BamHI; Site 2: BglII;
RescueMu is a 4.9 kb, modified maize Mu transposon
designed to allow plasmid rescue from total genomic DNA.
Mu elements insert preferentially into transcription

```

units. For more information on RescueMu, go to the web site 'www.zmdb.iastate.edu' and follow the links for 'RescueMu'. Grid L was grown in Molokai in 2001. DNA was extracted from leaf strips, double digested using BamHI and BglII, and ligated to form circular plasmids. DH10B cells were transformed and then screened on LB plates with ampicillin."

ORIGIN

Query Match 68.0%; Score 6.8; DB 9; Length 47;
Best Local Similarity 66.7%; Pred. No. 4.5e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: |||: |||
Db 28 TACCGTTCG 20

RESULT 55

BZ582213 48 bp DNA linear GSS 17-DEC-2002
DEFINITION 3590.1_35.1.G02.2EL.Y.1 3590 - RescueMu Grid M Zea mays genomic,
genomic survey sequence.

ACCESSION BZ582213
VERSION BZ582213.1 GI:27217274
KEYWORDS GSS.

SOURCE

ORGANISM

Zea mays
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; PACAD
clade; Panicoideae; Andropogoneae; Zea.

1 (bases 1 to 48)

Malbot, V.

Maize genomic sequences found using engineered RescueMu transposon

Unpublished (2001)

JOURNAL

Contact: Walbot V

Department of Biological Sciences

Stanford University

855 California Ave, Palo Alto, CA 94304, USA

Tel: 650 723 2227

Fax: 650 725 8221

Email: walbot@stanford.edu

Possible ligation site of ends cut by 2 different endonucleases.

Reverse complemented post-ligation sequence from source sequence.

Plate: 3590.1.35.1 column: 17

Class: transposon-tagged.

FEATURES

source

1..48

Location/Qualifiers

/organism="Zea mays"

/mol_type="genomic DNA"

/cultivar="mixed background W23/A188/B73/K55"

/db_xref="taxon:4577"

/tissue_type="leaf"

/dev_stage="adult"

/lab_host="DH10B"

/clone_lib="3590 - RescueMu Grid M"

/notes="Organ: leaf; Vector: RescueMu (engineered from

pBluescript backbone); Site 1: BamHI; Site 2: BglII;

RescueMu is a 4.9 Kb, modified maize Mu transposon

designed to allow plasmid rescue from total genomic DNA.

Mu elements insert preferentially into transcription

units. For more information on RescueMu, go to the web

site 'www.zmdb.iastate.edu' and follow the links for

'RescueMu'. Grid M was grown at University of Arizona in

2001. DNA was extracted from leaf punches, double digested

using BamHI and BglII, and ligated to form circular

plasmids. DH10B cells were transformed and then screened

on LB plates with ampicillin."

ORIGIN

Query Match 68.0%; Score 6.8; DB 8; Length 48;
Best Local Similarity 66.7%; Pred. No. 4.5e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: |||: |||
Db 2 GATCGGTCG 10

RESULT 56

CC060177/c

LOCUS

DEFINITION

48 bp DNA linear GSS 08-APR-2003

BY02776-3prime Drosophila melanogaster P{BPGy2} P element insertion

lines Drosophila melanogaster genomic sequence recovered from 3'

end of P element, genomic survey sequence.

CC060177

CC060177.1 GI:29612173

GSS.

Drosophila melanogaster (fruit fly)

Drosophila melanogaster

Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;

Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha;

Ephydroidea; Drosophilidae; Drosophila.

1 (bases 1 to 48)

Levis, R., Hoskins, R., Liao, G., Mozden, N., Tsang, G., He, Y.,

Karpen, G., Bellen, H., Rubin, G. and Spradling, A.

The Berkeley Drosophila Genome Project Gene Disruption Project

Unpublished (2001)

Contact: Gerald Rubin

Berkeley Drosophila Genome Project

University of California, Berkeley

LSA Building, Berkeley, CA 94720-3200, USA

Fax: 5106439947

Email: gerry@fruitfly.berkeley.edu

Sequence recovery method was inverse PCR.

Sequence orientation is forward strand relative to 5' end of P

element

The P element insertion position is base 1 in the 48 bases. This

insertion position refers to the first base of the 8 base target

recognition sequence.

Class: transposon-tagged.

Location/Qualifiers

1..48

/organism="Drosophila melanogaster"

/mol_type="genomic DNA"

/db_xref="taxon:7227"

/clone_lib="Drosophila melanogaster P{BPGy2} P element

insertion lines"

/note="Inverse PCR was performed on Drosophila

melanogaster strains each of which contains one or more

P{BPGy2} P-element transposon insertion. The resultant

fragment for each strain was directly sequenced to

determine the genomic sequence at the site of insertion.

Details of the protocols used can be found at

http://www.fruitfly.org/about/methods/inverse.pcr.html."

ORIGIN

Query Match 68.0%; Score 6.8; DB 8; Length 48;

Best Local Similarity 66.7%; Pred. No. 4.5e+05;

Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: |||: |||
Db 12 GATCGTTCG 4

RESULT 57

AG197101/c

LOCUS

48 bp DNA linear GSS 06-MAR-2004

Pan troglodytes DNA, clone: RP43-077A23.TJ, genomic survey

sequence.

AG197101

AG197101.1 GI:45229277

GSS.

Pan troglodytes (chimpanzee)

Pan troglodytes

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Pan.

1
REFERENCE
AUTHORS
Park,H., Kim,Y., Kim,S., Han,Y., Woo,T., Park,K., Eun,C.J., Hoon,S.T., Chu,M., Kim,H., Joo,S., Kim,C., Song,W. and Yoo,H.
BAC end sequences of Library RP-43
Unpublished
REFERENCE
AUTHORS
Park,H., Kim,Y., Kim,S., Han,Y., Woo,T., Park,K., Eun,C.J., Hoon,S.T., Chu,M., Kim,H., Joo,S., Kim,C., Song,W. and Yoo,H.
Direct Submission
TITLE
JOURNAL
Submitted (07-JAN-2002) Hong-Seog Park, Korea Research Institute of Bioscience and Biotechnology (KRIBB), Genome Research Center (GRC); 52, Oun-dong, Yusong-gu, Daejeon 305-333, Korea
(E-mail:redstone@mail.krribb.re.kr, URL:http://phs.grc.krribb.re.kr/, Tel:82-42-866-7181, Fax:82-42-860-4409)
Clones are derived from the chimpanzee BAC library RP-43 This BAC end was generated during the R&D process and may have higher chance of clone tracking errors.
PRIMERS
Sequencing: TJ
LIBRARY
Vector : pBACe3.6
R.Site 1 : EcoRI
R.Site 2 : EcoRI
Location/Qualifiers
1. .48
/organism="Pan troglodytes"
/mol_type="genomic DNA"
/db_xref="taxon:9598"
/clone="RP43-077A23.TJ"
/sex="male"
/cell_type="lymphocytes"
/clone_lib="RP-43 Chimpanzee Male BAC Library"

ORIGIN
Query Match 68.0%; Score 6.8; DB 9; Length 48;
Best Local Similarity 66.7%; Pred. No. 4.5e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
QY 2 DANCGRKTCG 10
: |||:
Db 39 GAACGGTTCG 31

RESULT 58
BX285564
LOCUS
DEFINITION
Arabidopsis thaliana T-DNA flanking sequence GK-383G05-01720,
genomic survey sequence.
ACCESSION
BX285564
VERSION
BX285564.1 GI:28884560
KEYWORDS
GSS.
SOURCE
Arabidopsis thaliana (thale cress)
ORGANISM
Arabidopsis thaliana
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots;
rosids; eurosids II; Brassicales; Brassicaceae; Arabidopsis.

REFERENCE
1
AUTHORS
Li,Y., Rosso,M.G., Strizhov,N., Viehoveer,P. and Weisshaar,B.
GABI-Kat SimpleSearch: a flanking sequence tag (FST) database for the identification of T-DNA insertion mutants in Arabidopsis thaliana
Bioinformatics 19 (11), 1441-1442 (2003)
MEDLINE
22755829
PUBLISHED
12874060
REFERENCE
2
AUTHORS
Rosso,M.G., Li,Y., Strizhov,N., Reiss,B., Dekker,K. and Weisshaar,B.
An Arabidopsis thaliana T-DNA mutagenized population (GABI-Kat) for flanking sequence tag-based reverse genetics
Plant Mol. Biol. 53 (1-2), 247-259 (2003)
MEDLINE
23117147

14756321
3
REFERENCE
AUTHORS
Strizhov,N., Li,Y., Rosso,M.G., Viehoveer,P., Dekker,K.A. and Weisshaar,B.
High-throughput generation of sequence indexes from T-DNA mutagenized Arabidopsis thaliana lines
BioTechniques 35 (6), 1164-1168 (2003)
JOURNAL
PUBLISHED
14682050
REFERENCE
4 (bases 1 to 48)
Strizhov,N., Rosso,M.G., Li,Y. and Weisshaar,B.
Direct Submission
TITLE
JOURNAL
Submitted (31-MAR-2004) Weisshaar B., Max-Planck-Institut fuer Zuechtungsforschung, Carl-von-Linne-Weg 10, Koeln, 50829, Germany
This sequence has been recovered from the left border of the T-DNA. It indicates an insertion within the locus defined by BAC clone f15b18. Details on the protocols used for generation of the sequence are described in References 1-3. The sequences are generated at the MPI for Plant Breeding Research in the context of the GABI-Kat project. GABI-Kat is part of the German Plant Genomics program designated 'GABI'. Information on line availability can be found at: <http://www.mpiz-koeln.mpg.de/GABI-Kat/>.
Location/Qualifiers
1. .48
/organism="Arabidopsis thaliana"
/mol_type="genomic DNA"
/strain="Columbia 0"
/db_xref="taxon:3702"
/clone="GK-383G05-01720"
/clone_lib="Arabidopsis thaliana T-DNA insertion lines"
/ecotype="Col-0"
/note="PCR was performed on DNA from Arabidopsis thaliana plants (T1) which were transformed with the T-DNA from vector PAC161 (Genbank accession number: AJ537514). The lines contain one or more T-DNA insertions. The DNA fragment(s) resulting from the PCR were directly sequenced to determine the genomic sequence flanking the insertion. T-DNA derived sequences were removed."

ORIGIN
Query Match 68.0%; Score 6.8; DB 9; Length 48;
Best Local Similarity 66.7%; Pred. No. 4.5e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
QY 2 DANCGRKTCG 10
: |||:
Db 12 GAACGGTTCG 20

RESULT 59
CL521328
LOCUS
DEFINITION
CL521328
Oryza sativa (japonica cultivar-group) genomic, genomic survey sequence.
ACCESSION
CL521328
VERSION
CL521328.1 GI:46148128
KEYWORDS
GSS.
SOURCE
Oryza sativa (japonica cultivar-group)
ORGANISM
Oryza sativa (japonica cultivar-group)
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae;
Ehrhartoideae; Oryzaceae; Oryza.
1 (bases 1 to 48)
Sallaud,C., Gay,C., Larmande,P., Bes,M., Piffanelli,P., Piegue,B., Droc,G., Regad,F., Bourgeois,E., Meynard,D., Perin,C., Chesquiere,A., Delseny,M., Glaszmann,J.C. and Guiderdoni,E.
High throughput T-DNA insertion mutagenesis in rice: A first step towards in silico reverse genetics
Plant J. (2004) In press
Contact: Guiderdoni
UMR PIA Biotrop program
CIRAD
TA 40/03 ave Agropolis 34398 Montpellier cedex 5 FRANCE

Tel: 33467615629
 Fax: 33467615605
 Email: emmanuel.guiderdon@cirad.fr
 Class: TDNA tagged.
 Location/Qualifiers
 1. .48
 /organism="Oryza sativa (japonica cultivar-group)"
 /mol_type="genomic DNA"
 /cultivar="Nipponbare"
 /db_xref="taxon:39947"
 /clone_lib="Flanking Sequence Tag of Oryza sativa T-DNA insertion lines"
 /note="PCR was performed on DNA of primary transformants of Oryza sativa plants. The DNA fragment(s) resulting of PCR were directly sequenced from the left border to determine the genomic sequence flanking the insertion. T-DNA derived sequences were removed. Information to order the corresponding mutant line and a link to a database providing a graphical display is available from June 2004 at <http://genoplante-info.infobiogen.fr/oryzatagline/>. This sequence has been generated in the framework of the French plant genomics program Genoplante (<http://www.genoplante.org> and <http://genoplante-info.infobiogen.fr>)."

ORIGIN

Query Match 68.0%; Score 6.8; DB 9; Length 48;
 Best Local Similarity 66.7%; Pred. No. 4.5e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANGCKTCG 10
 :|||:|
 Db 33 TACCGGTCG 41

RESULT 60
 AA087268/c
 LOCUS
 DEFINITION
 mol2g10.r1 Life Tech mouse embryo 10 5dpc 10665016 Mus musculus cDNA clone IMAGE:553410 5' similar to TR:G285961 G285961 mRNA ; mRNA sequence.

ACCESSION
 AA087268
 VERSION
 AA087268.1 GI:1630477
 KEYWORDS
 EST.
 SOURCE
 Mus musculus (house mouse)
 ORGANISM
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
 1 (bases 1 to 49)
 Marra,M., Hillier,L., Allen,M., Bowles,M., Dietrich,N., Dubuque,T., Geisel,S., Kucaba,T., Lacy,M., Le,M., Martin,J., Morris,M., Schellenberg,K., Steptoe,M., Tan,F., Underwood,K., Moore,B., Theising,B., Wylie,F., Lennon,G., Soares,B., Wilson,R. and Waterston,R.

TITLE
 The WashU-HMI Mouse EST Project
 JOURNAL
 Unpublished (1996)
 COMMENT
 Contact: Marra M/Mouse EST Project
 WashU-HMI Mouse EST Project
 Washington University School of Medicine
 4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108
 Tel: 314 286 1800
 Fax: 314 286 1810
 Email: mouseest@watson.wustl.edu
 This clone is available royalty-free through LNL ; contact the IMAGE Consortium (info@image.llnl.gov) for further information.
 MGI:334202
 Possible reversed clone: similarity on wrong strand
 Seq primer: -28M13 rev1 from Amersham
 High quality sequence stop: 1.
 Location/Qualifiers
 1. .49
 /organism="Mus musculus"
 /mol_type="mRNA"

FEATURES
 source

/strain="C57BL/6J"
 /db_xref="taxon:10090"
 /clone="IMAGE:553410"
 /tissue_type="embryo"
 /dev_stage="10.5dpc embryos"
 /lab_host="DH10B"
 /clone_lib="Life Tech mouse embryo 10 5dpc 10665016"
 /note="Organ: whole mouse; Vector: pCMV-SPORT2; Site: 1; SalI; Site: 2; NotI; Cloned unidirectionally. Primer: Oligo dT. 10.5dpc embryos. pCMV-SPORT2 vector."

ORIGIN

Query Match 68.0%; Score 6.8; DB 1; Length 49;
 Best Local Similarity 66.7%; Pred. No. 4.5e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANGCKTCG 10
 :|||:|
 Db 28 GACCGGTCG 20

RESULT 61
 AI900473
 LOCUS
 DEFINITION
 sc11b08.y1 Gm-cl012 Glycine max cDNA clone GENOME SYSTEMS CLONE ID: Gm-cl012-1840 5' similar to TR:Q42077 Q42077 POLLEN SPECIFIC PROTEIN PRECURSOR ; mRNA sequence.

ACCESSION
 AI900473
 VERSION
 AI900473.1 GI:5606439
 KEYWORDS
 EST.
 SOURCE
 Glycine max (soybean)
 ORGANISM
 Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; rosids; eurosids I; Fabales; Fabaceae; Papilionoideae; Phaseoleae; Glycine.

REFERENCE
 1 (bases 1 to 49)
 Shoemaker,R., Kein,P., Vodkin,L., Erpelding,J., Coryell,V., Khanna,A., Bolla,B., Marra,M., Hillier,L., Kucaba,T., Martin,J., Beck,C., Wylie,T., Underwood,K., Steptoe,M., Theising,B., Allen,M., Bowers,Y., Ritten,B., Swaller,T., Gibbons,M., Pape,D., Harvey,N., Schurk,R., Ritter,E., Kohn,S., Shin,T., Jackson,Y., Cardenas,M., McCann,R., Waterston,R. and Wilson,R.
 Public Soybean EST Project
 Unpublished (1999)
 TITLE
 Public Soybean EST Project
 JOURNAL
 Contact: Shoemaker R/Public Soybean EST Project
 Public Soybean EST Project
 Washington University School of Medicine
 4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108, USA
 Tel: 314 286 1800
 Fax: 314 286 1810
 Email: est@watson.wustl.edu
 When it has been determined, an EST from the other end of this clone is listed in the 'Other ESTs on clone' field. Trace considered overall poor quality possible reversed clone: similarity on wrong strand This clone is available through: Biogenetic Services, 801 32nd Ave. Brookings, SD 57006 USA (phone: 800 423 4163; email: info@biogeneticservices.com)
 Seq primer: -40RP from Gibco
 High quality sequence stop: 1.
 Location/Qualifiers
 1. .49
 /organism="Glycine max"
 /mol_type="mRNA"
 /cultivar="Williams"
 /db_xref="taxon:3847"
 /clone="GENOME SYSTEMS CLONE ID: Gm-cl012-1840"
 /tissue_type="Apical shoot tips, 9-10 day old etiolated seedlings"
 /lab_host="XL10-Gold"
 /clone_lib="Gm-cl012"
 /note="Vector: pBluescript II XR; Site: 1: EcoRI; Site 2: XhoI; This cDNA library was constructed from mRNA isolated

from the apical shoots of 9 to 10 day old etiolated seedlings. The shoot tips including any emerged leaves were harvested for mRNA isolation. The cDNA library was prepared using the Stratagene pBluescript II XR cDNA library construction kit. Complementary DNA was synthesized from mRNA using a primer consisting of a poly (dT) sequence with a XhoI restriction site. EcoRI adapters were ligated to the blunt-ended cDNA fragments followed by XhoI digestion. The cDNA fragments were directionally cloned into the EcoRI-XhoI restriction site of the pBluescript vector. The ligated cDNA fragments were transformed into X10-Gold host cells. This library was constructed by Dr. Randy Shoemaker and Dr. John Erpelnding."

ORIGIN

Query Match 68.0%; Score 6.8; DB 1; Length 49;
Best Local Similarity 66.7%; Pred. No. 4.5e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: || || || ||
DB 25 GAACGGTCG 33

RESULT 62
BE778801
LOCUS 601463874F1 NIH_MGC_67 Homo sapiens cDNA clone IMAGE:3867210 5',
DEFINITION mRNA sequence.

ACCESSION BE778801.1 GI:10199920
VERSION
KEYWORDS
SOURCE

ORGANISM Homo sapiens (human)

REFERENCE Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 49)

NIH-MGC http://mgs.nci.nih.gov/.

National Institutes of Health, Mammalian Gene Collection (MGC)

Unpublished (1999)

Contact: Robert Strausberg, Ph.D.

Email: cgabbs-r@mail.nih.gov

Tissue Procurement: ATCC

cDNA Library Preparation: Life Technologies, Inc.

cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)

DNA Sequencing by: Incyte Genomics, Inc.

Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:

http://image.llnl.gov

Plate: LLAM9613 row: c column: 19

High quality sequence stop: 49.

Location/Qualifiers

FEATURES

source
1. .49
/organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/clone="IMAGE:3867210"
/issue_type="retinoblastoma"
/lab_host="DH10B (phage-resistant)"
/clone_lib="NIH_MGC_67"
/note="Organ: eye; Vector: pCMV-SPORT6; Site: 1: NotI; Site 2: SalI; Cloned unidirectionally. Primer: Oligo dt. Average insert size 1.75 kb. Library constructed by Life Technologies."

ORIGIN

Query Match 68.0%; Score 6.8; DB 2; Length 49;
Best Local Similarity 66.7%; Pred. No. 4.5e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: || || || ||

DB 37 GACCGGTCG 45

RESULT 63

BE778801/c

LOCUS

DEFINITION

ACCESSION

VERSION

KEYWORDS

SOURCE

ORGANISM

REFERENCE

AUTHORS

TITLE

JOURNAL

COMMENT

COMMENT

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BE778801 49 bp mRNA linear EST 20-OCT-2000
601463874F1 NIH_MGC_67 Homo sapiens cDNA clone IMAGE:3867210 5',
DEFINITION mRNA sequence.

ACCESSION BE778801

VERSION BE778801.1 GI:10199920

KEYWORDS

SOURCE

ORGANISM

REFERENCE

AUTHORS

TITLE

JOURNAL

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BE778801 49 bp mRNA linear EST 20-OCT-2000
601463874F1 NIH_MGC_67 Homo sapiens cDNA clone IMAGE:3867210 5',
DEFINITION mRNA sequence.

ACCESSION BE778801

VERSION BE778801.1 GI:10199920

KEYWORDS

SOURCE

ORGANISM

REFERENCE

AUTHORS

TITLE

JOURNAL

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BE778801 49 bp mRNA linear EST 20-OCT-2000
601463874F1 NIH_MGC_67 Homo sapiens cDNA clone IMAGE:3867210 5',
DEFINITION mRNA sequence.

ACCESSION BE778801

VERSION BE778801.1 GI:10199920

KEYWORDS

SOURCE

ORGANISM

REFERENCE

AUTHORS

TITLE

JOURNAL

COMMENT

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COMMENT

CDNA Library Preparation: Life Technologies, Inc.
 CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
 DNA Sequencing by: Incyte Genomics, Inc.
 Clone distribution: MGC clone distribution information can be
 found through the I.M.A.G.E. Consortium/LLNL at:
<http://image.llnl.gov>
 Plate: L1AM1955 row: i column: 05
 High quality sequence stop: 36.

FEATURES

source
 1. .49
 Location/Qualifiers
 /organism="Mus musculus"
 /mol_type="mRNA"
 /strain="FVB/N-3"
 /db_xref="taxon:10090"
 /clone="IMAGE:5375308"
 /tissue_type="tumor, biopsy sample"
 /dev_stage="5 months"
 /lab_host="DH10B"
 /clone_lib="NCI_CGAP_Mam2"
 /notes="Organ: mammary; Vector: pCMV-SPORT6; Site_1: Sali;
 Site_2: NotI; Cloned unidirectionally. Primer: Oligo dt.
 Library constructed by Life Technologies. Investigator
 providing samples: Gilbert Smith, NIH"

ORIGIN

Query Match 68.0%; Score 6.8; DB 4; Length 49;
 Best Local Similarity 66.7%; Pred. No. 4.5e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 2 DANCCKTCG 10

Db 16 GAGCGGTCG 24

RESULT 65

U38158/c
 LOCUS
 DEFINITION OSU38158 FDRSC Oryza sativa (indica cultivar-group) cDNA clone
 pFDRSC533, mRNA sequence.
 U38158
 ACCESSION U38158.1 GI:1037089
 VERSION EST.
 KEYWORDS Oryza sativa (indica cultivar-group)
 SOURCE Oryza sativa (indica cultivar-group)
 ORGANISM Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
 Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae;
 Ehrhartoideae; Oryzeae; Oryza.
 1. (bases 1 to 49)
 XIAO, C.
 TITLE Rice cDNA partial sequence
 JOURNAL Unpublished (1995)
 COMMENT Contact: Chuan Xiao
 Fudan University
 Handan Road 220#, Shanghai 200433, People's Republic of China.

FEATURES

source
 1. .49
 Location/Qualifiers
 /organism="Oryza sativa (indica cultivar-group)"
 /mol_type="mRNA"
 /cultivar="Guang Lu Ai 4"
 /db_xref="taxon:39946"
 /clone="pFDRSC533"
 /clone_lib="pFDRSC"

ORIGIN

Query Match 68.0%; Score 6.8; DB 7; Length 49;
 Best Local Similarity 66.7%; Pred. No. 4.5e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 2 DANCCKTCG 10

Db 24 AAGCGGTCG 16

RESULT 66

BZ383782
 LOCUS
 DEFINITION BZ383782 49 bp DNA linear GSS 26-NOV-2002
 SALK_134485.18.75.n Arabidopsis thaliana TDNA insertion lines
 Arabidopsis thaliana genomic clone SALK_134485.18.75.n, genomic
 survey sequence.

ACCESSION

BZ383782

VERSION

BZ383782.1 GI:25480326

KEYWORDS

SOURCE

ORGANISM

Arabidopsis thaliana (thale cress)
 Arabidopsis thaliana
 Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
 Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots;
 rosids; eurosids II; Brassicales; Brassicaceae; Arabidopsis.

REFERENCE

AUTHORS

1. (bases 1 to 49)
 Alonso, J.M., Leisse, T.J., Barajas, P., Chen, H., Cheuk, R.,
 Gadrinab, C., Jeske, A., Karnes, M., Kim, C.J., Parker, H., Prednis, L.,
 Shinn, P., Zimmerman, J., and Ecker, J.R.

TITLE

A Sequence-Indexed Library of Insertion Mutations in the

JOURNAL

COMMENT

Arabidopsis Genome
 Contact: Joseph R. Ecker
 Salk Institute Genomic Analysis Laboratory (SIGNAL)
 The Salk Institute for Biological Studies
 10010 N. Torrey Pines Road, La Jolla, CA 92037, USA
 Tel: 858 453 4100 x1752
 Fax: 858 558 6379
 Email: ecker@salk.edu
 This is single pass sequence recovered from the left border of
 TDNA. This sequence lies within an annotated exon of At5g14680.
 Class: TDNA tagged.

FEATURES

source

1. .49
 Location/Qualifiers
 /organism="Arabidopsis thaliana"
 /mol_type="genomic DNA"
 /ecotype="Col-0"
 /db_xref="taxon:3702"
 /clone="SALK_134485.18.75.n"
 /clone_lib="Arabidopsis thaliana TDNA insertion lines"
 /note="PCR was performed on Arabidopsis thaliana lines
 each of which contains one or more TDNA insertion
 elements. The resultant fragment for each line was
 directly sequenced to determine the genomic sequence at
 the site of insertion. Details of the protocols used can
 be found at http://signal.salk.edu/tdna_protocols.html"

ORIGIN

Query Match 68.0%; Score 6.8; DB 8; Length 49;
 Best Local Similarity 66.7%; Pred. No. 4.5e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 2 DANCCKTCG 10

Db 21 GATCGTTCG 29

RESULT 67

AJ622567/c
 LOCUS
 DEFINITION AJ622567 49 bp DNA linear GSS 28-JAN-2004
 Drosophila melanogaster flanking sequence of RS P element insertion
 P{RS}5-HA-2901, clone library P{RS5}, genomic survey sequence.
 AJ622567
 ACCESSION AJ622567.1 GI:41366786
 VERSION GSS; genome survey sequence.
 KEYWORDS Drosophila melanogaster (fruit fly)
 SOURCE Drosophila melanogaster
 ORGANISM Eukaryota; Metazoa; Arthropoda; Insecta; Pterygota;
 Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha;
 Ephydroidea; Drosophilidae; Drosophila.

REFERENCE

AUTHORS

1.
 Ryder, E.J., Ashburner, M., Bagunya, J., Blows, F., Bucheton, A.,
 Coulson, D., Dickson, B., Drummond, J., Glover, D., Gunton, N.,
 Hafen, E., Hall, S., Heisenberg, M., Lepesant, J.A., Maroy, P.,

Mechler,B., O'Kane,C., Pflugfelder,G., Rasmuson-Lestander,A.,
Reuter,G., Roote,J., Szidonya,J., Wang,S., Webster,J. and
Russell,S.

TITLE Mapping of RS P element insertions in Drosophila melanogaster for
the Drosdel second generation deficiency kit

JOURNAL Unpublished

REFERENCE 2 (bases 1 to 49)

AUTHORS Ryder,E.J.

TITLE Direct Submission

JOURNAL Submitted (19-JAN-2004) Ryder E.J., Department of Genetics,
University of Cambridge, Downing Street, CB23EH, UNITED KINGDOM

COMMENT The insertion point of the P element is before base 1 of the
sequence. Further information about this P element insertion line
can be found at <http://www.flyseq.org.uk> and
<http://www.drosdel.org.uk>.

FEATURES Location/Qualifiers

source
1..49
/organism="Drosophila melanogaster"
/mol_type="genomic DNA"
/db_xref="taxon:7227"
/chromosome="X"
/clone="P{RS5}5-HA-2901"
/clone_lib="P{RS5}"
/notes="read=5' end"
misc_feature
1..49
/notes="P element insertion in the 3' to 5' orientation"

ORIGIN

Query Match 68.0%; Score 6.8; DB 9; Length 49;
Best Local Similarity 66.7%; Pred. No. 4.5e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10

Db : |||: |||

38 GATCGTTCG 30

RESULT 68

CNS07F9C

LOCUS 49 bp DNA linear GSS 02-OCT-2001
DEFINITION Anopheles gambiae GSS T7 end of clone 06C03 of library NotreDame1
from strain PEST of Anopheles gambiae (African malaria mosquito),
genomic survey sequence.

ACCESSION AL608178

VERSION AL608178.1 GI:15914363

KEYWORDS GSS.

SOURCE Anopheles gambiae (African malaria mosquito)

ORGANISM Anopheles gambiae

Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;

Neoptera; Endopterygota; Diptera; Nematocera; Culicoidea;

Anopheles.

REFERENCE 1 (bases 1 to 49)

AUTHORS Genoscope.

TITLE Direct Submission

JOURNAL Submitted (01-OCT-2001) Genoscope - Centre National de Sequencage :

BP 191 91006 EVRY cedex - FRANCE (E-mail : segref@genoscope.cns.fr

- Web : www.genoscope.cns.fr)

2 (bases 1 to 49)

AUTHORS Roth,C.W., Brey,P.T., Ke,Z. and Collins,F.H.

TITLE Direct Submission

JOURNAL Submitted (01-OCT-2001) RBMI, Institut Pasteur, 25, rue du Dr.

Roux, Paris 75015, France

COMMENT This clone is from an A. gambiae BAC library provided by F.H.

Collins and sequenced by Genoscope in collaboration with the

Laboratory of Biochem. and Biol. Molec. of Insects, Institut

Pasteur.

FEATURES Location/Qualifiers

source
1..49
/organism="Anopheles gambiae"
/mol_type="genomic DNA"
/strain="PEST"
/db_xref="taxon:7165"
/clone="06C03"

ORIGIN
/clone_lib="NotreDame1"
/note="end : T7"

Query Match 68.0%; Score 6.8; DB 9; Length 49;

Best Local Similarity 66.7%; Pred. No. 4.5e+05;

Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10

Db : |||: |||

5 GACGCTCG 13

RESULT 69

AUI02871

LOCUS 50 bp mRNA linear EST 28-JAN-2004
DEFINITION AUI02871 Sugano Homo sapiens cDNA library Homo sapiens cDNA clone
HSI02318, mRNA sequence.

ACCESSION AUI02871

VERSION AUI02871.1 GI:13552392

KEYWORDS EST.

SOURCE Homo sapiens (human)

ORGANISM Homo sapiens

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE 1 (bases 1 to 50)

AUTHORS Suzuki,Y., Taira,H., Tsunoda,T., Mizushima-Sugano,J., Sese,J.,

Hata,H., Ota,T., Isogai,T., Tanaka,T., Morishita,S., Okubo,K.,

Sakaki,Y., Nakamura,Y., Suyama,A. and Sugano,S.

Diverse transcriptional initiation revealed by fine, large-scale

mapping of mRNA start sites

JOURNAL EMBO Rep. 2 (5), 388-393 (2001)

MEDLINE 21270072

PUBMED 11375929

COMMENT Contact: Yutaka Suzuki

Department of Virology

Institute of Medical Science, University of Tokyo

4-6-1, Shirokanedai, Minatoku, Tokyo 108-8639, Japan

Email: ysuzuki@ims.u-tokyo.ac.jp

Suzuki,Y., Yoshitomo-Nakagawa,K., Maruyama,K., Suyama,A. and

Sugano,S. Construction and characterization of a full

length-enriched and a 5'-end-enriched cDNA library. Gene 200 (1-2),

149-156 (1997).

FEATURES Location/Qualifiers

source

1..50

/organism="Homo sapiens"

/mol_type="mRNA"

/db_xref="taxon:9606"

/clone="HSI02318"

/clone_lib="Sugano Homo sapiens cDNA library"

ORIGIN

Query Match 68.0%; Score 6.8; DB 1; Length 50;

Best Local Similarity 66.7%; Pred. No. 4.5e+05;

Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10

Db : |||: |||

29 GATCGGTCG 37

RESULT 70

AUI04223

LOCUS 50 bp mRNA linear EST 28-JAN-2004

DEFINITION AUI04223 Sugano Homo sapiens cDNA library Homo sapiens cDNA clone

HEP21349, mRNA sequence.

ACCESSION AUI04223

VERSION AUI04223.1 GI:13553744

KEYWORDS EST.

SOURCE Homo sapiens (human)

ORGANISM Homo sapiens

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

```

REFERENCE
AUTHORS      Suzuki,Y., Taira,H., Tsunoda,T., Mizushima-Sugano,J., Sese,J.,
              Hata,H., Ota,T., Isogai,T., Tanaka,T., Morishita,S., Okubo,K.,
              Sakaki,Y., Nakamura,Y., Suyama,A. and Sugano,S.
TITLE        Diverse transcriptional initiation revealed by fine, large-scale
              mapping of mRNA start sites
JOURNAL      EMO Rep. 2 (5), 388-393 (2001)
MEDLINE      21270072
PUBMED       11375929
COMMENT      Contact: Yutaka Suzuki
              Department of Virology
              Institute of Medical Science, University of Tokyo
              4-6-1, Shirokanedai, Minatoku, Tokyo 108-8639, Japan
              Email: yusuzuki@ims.u-tokyo.ac.jp
              Suzuki,Y., Yoshitomo-Nakagawa,K., Maruyama,K., Suyama,A. and
              Sugano,S. Construction and characterization of a full
              length-enriched and a 5'-end-enriched cDNA library. Gene 200 (1-2),
              149-156 (1997).
FEATURES
source      Location/Qualifiers
1..50
/organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/clone="HEP21349"
/clone_lib="Sugano Homo sapiens cDNA library"
ORIGIN
Query Match      68.0%; Score 6.8; DB 1; Length 50;
Best Local Similarity 66.7%; Pred. No. 4.5e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
Qy
Db
2 DANCCKTCG 10
:|:|:|:|
24 TAACGGTTCG 32

RESULT 71
AUI04277
LOCUS          AUI04277 Sugano Homo sapiens cDNA library Homo sapiens cDNA clone
DEFINITION    HEP20513, mRNA sequence.
ACCESSION     AUI04277.1 GI:13553798
VERSION       AUI04277.1
KEYWORDS      EST.
SOURCE        Homo sapiens (human)
ORGANISM      Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
              Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE
AUTHORS      Suzuki,Y., Taira,H., Tsunoda,T., Mizushima-Sugano,J., Sese,J.,
              Hata,H., Ota,T., Isogai,T., Tanaka,T., Morishita,S., Okubo,K.,
              Sakaki,Y., Nakamura,Y., Suyama,A. and Sugano,S.
              Diverse transcriptional initiation revealed by fine, large-scale
              mapping of mRNA start sites
JOURNAL      EMO Rep. 2 (5), 388-393 (2001)
MEDLINE      21270072
PUBMED       11375929
COMMENT      Contact: Yutaka Suzuki
              Department of Virology
              Institute of Medical Science, University of Tokyo
              4-6-1, Shirokanedai, Minatoku, Tokyo 108-8639, Japan
              Email: yusuzuki@ims.u-tokyo.ac.jp
              Suzuki,Y., Yoshitomo-Nakagawa,K., Maruyama,K., Suyama,A. and
              Sugano,S. Construction and characterization of a full
              length-enriched and a 5'-end-enriched cDNA library. Gene 200 (1-2),
              149-156 (1997).
FEATURES
source      Location/Qualifiers
1..50
/organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/clone="HEP20513"
/clone_lib="Sugano Homo sapiens cDNA library"
ORIGIN
Query Match      68.0%; Score 6.8; DB 1; Length 50;
Best Local Similarity 66.7%; Pred. No. 4.5e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
Qy
Db
2 DANCCKTCG 10
:|:|:|:|
24 TAACGGTTCG 32

RESULT 71
AUI04277
LOCUS          AUI04277 Sugano Homo sapiens cDNA library Homo sapiens cDNA clone
DEFINITION    HEP20513, mRNA sequence.
ACCESSION     AUI04277.1 GI:13553798
VERSION       AUI04277.1
KEYWORDS      EST.
SOURCE        Homo sapiens (human)
ORGANISM      Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
              Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE
AUTHORS      Suzuki,Y., Taira,H., Tsunoda,T., Mizushima-Sugano,J., Sese,J.,
              Hata,H., Ota,T., Isogai,T., Tanaka,T., Morishita,S., Okubo,K.,
              Sakaki,Y., Nakamura,Y., Suyama,A. and Sugano,S.
              Diverse transcriptional initiation revealed by fine, large-scale
              mapping of mRNA start sites
JOURNAL      EMO Rep. 2 (5), 388-393 (2001)
MEDLINE      21270072
PUBMED       11375929
COMMENT      Contact: Yutaka Suzuki
              Department of Virology
              Institute of Medical Science, University of Tokyo
              4-6-1, Shirokanedai, Minatoku, Tokyo 108-8639, Japan
              Email: yusuzuki@ims.u-tokyo.ac.jp
              Suzuki,Y., Yoshitomo-Nakagawa,K., Maruyama,K., Suyama,A. and
              Sugano,S. Construction and characterization of a full
              length-enriched and a 5'-end-enriched cDNA library. Gene 200 (1-2),
              149-156 (1997).
FEATURES
source      Location/Qualifiers
1..50
/organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/clone="HEP20513"
/clone_lib="Sugano Homo sapiens cDNA library"

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ORIGIN
Query Match      68.0%; Score 6.8; DB 1; Length 50;
Best Local Similarity 66.7%; Pred. No. 4.5e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
Qy
Db
2 DANCCKTCG 10
:|:|:|:|
28 TAACGGTTCG 36

RESULT 72
AUI04506/c
LOCUS          AUI04506 Sugano Homo sapiens cDNA library Homo sapiens cDNA clone
DEFINITION    CAS06466, mRNA sequence.
ACCESSION     AUI04506
VERSION       AUI04506.1 GI:13554027
KEYWORDS      EST.
SOURCE        Homo sapiens (human)
ORGANISM      Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
              Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE
AUTHORS      Suzuki,Y., Taira,H., Tsunoda,T., Mizushima-Sugano,J., Sese,J.,
              Hata,H., Ota,T., Isogai,T., Tanaka,T., Morishita,S., Okubo,K.,
              Sakaki,Y., Nakamura,Y., Suyama,A. and Sugano,S.
              Diverse transcriptional initiation revealed by fine, large-scale
              mapping of mRNA start sites
JOURNAL      EMO Rep. 2 (5), 388-393 (2001)
MEDLINE      21270072
PUBMED       11375929
COMMENT      Contact: Yutaka Suzuki
              Department of Virology
              Institute of Medical Science, University of Tokyo
              4-6-1, Shirokanedai, Minatoku, Tokyo 108-8639, Japan
              Email: yusuzuki@ims.u-tokyo.ac.jp
              Suzuki,Y., Yoshitomo-Nakagawa,K., Maruyama,K., Suyama,A. and
              Sugano,S. Construction and characterization of a full
              length-enriched and a 5'-end-enriched cDNA library. Gene 200 (1-2),
              149-156 (1997).
FEATURES
source      Location/Qualifiers
1..50
/organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/clone="CAS06466"
/clone_lib="Sugano Homo sapiens cDNA library"
ORIGIN
Query Match      68.0%; Score 6.8; DB 1; Length 50;
Best Local Similarity 66.7%; Pred. No. 4.5e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
Qy
Db
2 DANCCKTCG 10
:|:|:|:|
25 AAGCGGTTCG 17

RESULT 73
AUI05095
LOCUS          AUI05095 Sugano Homo sapiens cDNA library Homo sapiens cDNA clone
DEFINITION    HEP20564, mRNA sequence.
ACCESSION     AUI05095
VERSION       AUI05095.1 GI:13554616
KEYWORDS      EST.
SOURCE        Homo sapiens (human)
ORGANISM      Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
              Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE
AUTHORS      Suzuki,Y., Taira,H., Tsunoda,T., Mizushima-Sugano,J., Sese,J.,

```

Hata,H., Ota,T., Isogai,T., Tanaka,T., Tanaka,T., Morishita,S., Okubo,K.,
Sakaki,Y., Nakamura,Y., Suyama,A. and Sugano,S.
Diverse transcriptional initiation revealed by fine, large-scale
mapping of mRNA start sites
EMBO Rep. 2 (5), 388-393 (2001)

JOURNAL
MEDLINE
PUBMED
COMMENT

21270072
11375929

Contact: Yutaka Suzuki
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Email: yezukui@ims.u-tokyo.ac.jp

Suzuki,Y., Yoshitomo-Nakagawa,K., Maruyama,K., Suyama,A. and
Sugano,S. Construction and characterization of a full
length-enriched and a 5'-end-enriched cDNA library. Gene 200 (1-2),
149-156 (1997).

FEATURES

source
1. .50
/organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/clone="HFP20564"
/clone_lib="Sugano Homo sapiens cDNA library"

ORIGIN

Query Match 68.0%; Score 6.8; DB 1; Length 50;
Best Local Similarity 66.7%; Pred. No. 4.5e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCTG 10
: |||:
Db 9 GAACGGCTCG 17

RESULT 74

AU105096

LOCUS

DEFINITION AU105096 Sugano Homo sapiens cDNA library Homo sapiens cDNA clone
HRC01943, mRNA sequence.

ACCESSION AU105096

VERSION AU105096.1 GI:13554617

KEYWORDS EST.

SOURCE Homo sapiens

ORGANISM Homo sapiens

REFERENCE 1 (bases 1 to 50)
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

AUTHORS Suzuki,Y., Taira,H., Tsunoda,T., Mizushima-Sugano,J., Sese,J.,

Hata,H., Ota,T., Isogai,T., Tanaka,T., Morishita,S., Okubo,K.,
Sakaki,Y., Nakamura,Y., Suyama,A. and Sugano,S.

Diverse transcriptional initiation revealed by fine, large-scale
mapping of mRNA start sites

EMBO Rep. 2 (5), 388-393 (2001)

JOURNAL
MEDLINE
PUBMED

21270072
11375929

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4-6-1, Shirokanedai, Minatoku, Tokyo 108-8639, Japan
Email: yezukui@ims.u-tokyo.ac.jp

Suzuki,Y., Yoshitomo-Nakagawa,K., Maruyama,K., Suyama,A. and
Sugano,S. Construction and characterization of a full
length-enriched and a 5'-end-enriched cDNA library. Gene 200 (1-2),
149-156 (1997).

FEATURES

source
1. .50
/organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/clone="HRC01943"
/clone_lib="Sugano Homo sapiens cDNA library"

ORIGIN

Query Match 68.0%; Score 6.8; DB 1; Length 50;
Best Local Similarity 66.7%; Pred. No. 4.5e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCTG 10
: |||:
Db 9 GAACGGCTCG 17

RESULT 75

AU105098

LOCUS

DEFINITION AU105098 Sugano Homo sapiens cDNA library Homo sapiens cDNA clone
KAT01889, mRNA sequence.

ACCESSION AU105098

VERSION AU105098.1 GI:13554619

KEYWORDS EST.

SOURCE Homo sapiens

ORGANISM Homo sapiens

REFERENCE 1 (bases 1 to 50)
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

AUTHORS Suzuki,Y., Taira,H., Tsunoda,T., Mizushima-Sugano,J., Sese,J.,

Hata,H., Ota,T., Isogai,T., Tanaka,T., Morishita,S., Okubo,K.,
Sakaki,Y., Nakamura,Y., Suyama,A. and Sugano,S.

Diverse transcriptional initiation revealed by fine, large-scale
mapping of mRNA start sites

EMBO Rep. 2 (5), 388-393 (2001)

JOURNAL
MEDLINE
PUBMED

21270072
11375929

COMMENT

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Email: yezukui@ims.u-tokyo.ac.jp

Suzuki,Y., Yoshitomo-Nakagawa,K., Maruyama,K., Suyama,A. and
Sugano,S. Construction and characterization of a full
length-enriched and a 5'-end-enriched cDNA library. Gene 200 (1-2),
149-156 (1997).

FEATURES

source
1. .50
/organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/clone="KAT01889"
/clone_lib="Sugano Homo sapiens cDNA library"

ORIGIN

Query Match 68.0%; Score 6.8; DB 1; Length 50;
Best Local Similarity 66.7%; Pred. No. 4.5e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCTG 10
: |||:
Db 9 GAACGGCTCG 17

RESULT 76

AU105834

LOCUS

DEFINITION AU105834 Sugano Homo sapiens cDNA library Homo sapiens cDNA clone
KAT11187, mRNA sequence.

ACCESSION AU105834

VERSION AU105834.1 GI:13555355

KEYWORDS EST.

SOURCE Homo sapiens

ORGANISM Homo sapiens

REFERENCE 1 (bases 1 to 50)
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

AUTHORS Suzuki,Y., Taira,H., Tsunoda,T., Mizushima-Sugano,J., Sese,J.,

Hata,H., Ota,T., Isogai,T., Tanaka,T., Morishita,S., Okubo,K.,
Sakaki,Y., Nakamura,Y., Suyama,A. and Sugano,S.

TITLE Diverse transcriptional initiation revealed by fine, large-scale mapping of mRNA start sites

JOURNAL EMBO Rep. 2 (5), 388-393 (2001)

MEDLINE 21270072

PUBMED 11375929

COMMENT Contact: Yutaka Suzuki
Department of Virology
Institute of Medical Science, University of Tokyo
4-6-1, Shirokanedai, Minatoku, Tokyo 108-8639, Japan
Email: yuzuki@ims.u-tokyo.ac.jp
Suzuki, Y., Yoshitomo-Nakagawa, K., Maruyama, K., Suyama, A. and Sugano, S. Construction and characterization of a full length-enriched and a 5'-end-enriched cDNA library. Gene 200 (1-2), 149-156 (1997).

FEATURES Location/Qualifiers

source 1..50

/organism="Homo sapiens"

/mol_type="mRNA"

/db_xref="taxon:9606"

/clone="KAT1187"

/clone_lib="Sugano Homo sapiens cDNA library"

ORIGIN

Query Match 68.0%; Score 6.8; DB 1; Length 50;
Best Local Similarity 66.7%; Pred. No. 4.5e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
:|||||

Db 24 GATCGGTCG 32
:|||||

RESULT 77

AUI06702

LOCUS AUI06702 50 bp mRNA linear EST 28-JAN-2004

DEFINITION AUI06702 Sugano Homo sapiens cDNA library Homo sapiens cDNA clone KAT09820, mRNA sequence.

ACCESSION AUI06702

VERSION AUI06702.1 GI:13556223

KEYWORDS EST.

SOURCE Homo sapiens (human)

ORGANISM Homo sapiens

REFERENCE 1 (bases 1 to 50)
Suzuki, Y., Taira, H., Tsunoda, T., Mizushima-Sugano, J., Sese, J., Hata, H., Ota, T., Isogai, T., Tanaka, T., Morishita, S., Okubo, K., Sakaki, Y., Nakamura, Y., Suyama, A. and Sugano, S.
Diverse transcriptional initiation revealed by fine, large-scale mapping of mRNA start sites

TITLE Diverse transcriptional initiation revealed by fine, large-scale mapping of mRNA start sites

JOURNAL EMBO Rep. 2 (5), 388-393 (2001)

MEDLINE 21270072

PUBMED 11375929

COMMENT Contact: Yutaka Suzuki
Department of Virology
Institute of Medical Science, University of Tokyo
4-6-1, Shirokanedai, Minatoku, Tokyo 108-8639, Japan
Email: yuzuki@ims.u-tokyo.ac.jp
Suzuki, Y., Yoshitomo-Nakagawa, K., Maruyama, K., Suyama, A. and Sugano, S. Construction and characterization of a full length-enriched and a 5'-end-enriched cDNA library. Gene 200 (1-2), 149-156 (1997).

FEATURES Location/Qualifiers

source 1..50

/organism="Homo sapiens"

/mol_type="mRNA"

/db_xref="taxon:9606"

/clone="KAT09820"

/clone_lib="Sugano Homo sapiens cDNA library"

ORIGIN

Query Match 68.0%; Score 6.8; DB 1; Length 50;
Best Local Similarity 66.7%; Pred. No. 4.5e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
:|||||

Db 18 GAGCGTTCG 26
:|||||

RESULT 78

AUI06741/c

LOCUS AUI06741 50 bp mRNA linear EST 28-JAN-2004

DEFINITION AUI06741 Sugano Homo sapiens cDNA library Homo sapiens cDNA clone ADKA02253, mRNA sequence.

ACCESSION AUI06741

VERSION AUI06741.1 GI:13556262

KEYWORDS EST.

SOURCE Homo sapiens (human)

ORGANISM Homo sapiens

REFERENCE 1 (bases 1 to 50)
Suzuki, Y., Taira, H., Tsunoda, T., Mizushima-Sugano, J., Sese, J., Hata, H., Ota, T., Isogai, T., Tanaka, T., Morishita, S., Okubo, K., Sakaki, Y., Nakamura, Y., Suyama, A. and Sugano, S.
Diverse transcriptional initiation revealed by fine, large-scale mapping of mRNA start sites

TITLE Diverse transcriptional initiation revealed by fine, large-scale mapping of mRNA start sites

JOURNAL EMBO Rep. 2 (5), 388-393 (2001)

MEDLINE 21270072

PUBMED 11375929

COMMENT Contact: Yutaka Suzuki
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4-6-1, Shirokanedai, Minatoku, Tokyo 108-8639, Japan
Email: yuzuki@ims.u-tokyo.ac.jp
Suzuki, Y., Yoshitomo-Nakagawa, K., Maruyama, K., Suyama, A. and Sugano, S. Construction and characterization of a full length-enriched and a 5'-end-enriched cDNA library. Gene 200 (1-2), 149-156 (1997).

FEATURES Location/Qualifiers

source 1..50

/organism="Homo sapiens"

/mol_type="mRNA"

/db_xref="taxon:9606"

/clone="ADKA02253"

/clone_lib="Sugano Homo sapiens cDNA library"

ORIGIN

Query Match 68.0%; Score 6.8; DB 1; Length 50;
Best Local Similarity 66.7%; Pred. No. 4.5e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
:|||||

Db 36 AAGCGGTCG 28
:|||||

RESULT 79

AUI07943

LOCUS AUI07943 50 bp mRNA linear EST 28-JAN-2004

DEFINITION AUI07943 Sugano Homo sapiens cDNA library Homo sapiens cDNA clone COL08777, mRNA sequence.

ACCESSION AUI07943

VERSION AUI07943.1 GI:13557465

KEYWORDS EST.

SOURCE Homo sapiens (human)

ORGANISM Homo sapiens

REFERENCE 1 (bases 1 to 50)
Suzuki, Y., Taira, H., Tsunoda, T., Mizushima-Sugano, J., Sese, J., Hata, H., Ota, T., Isogai, T., Tanaka, T., Morishita, S., Okubo, K., Sakaki, Y., Nakamura, Y., Suyama, A. and Sugano, S.
Diverse transcriptional initiation revealed by fine, large-scale mapping of mRNA start sites

TITLE Diverse transcriptional initiation revealed by fine, large-scale mapping of mRNA start sites

JOURNAL
MEDLINE
PUBMED
COMMENT

EMBO Rep. 2 (5), 388-393 (2001)
21270072
11375929
Contact: Yutaka Suzuki
Department of Virology
Institute of Medical Science, University of Tokyo
4-6-1, Shirokanedai, Minatoku, Tokyo 108-8639, Japan
Email: yuzuki@ims.u-tokyo.ac.jp
Suzuki, Y., Yoshitomo-Nakagawa, K., Maruyama, K., Suyama, A. and Sugano, S. Construction and characterization of a full length-enriched and a 5'-end-enriched cDNA library. Gene 200 (1-2), 149-156 (1997).

FEATURES
source
1. .50
Location/Qualifiers
/organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/clone="COL08777"
/clone_lib="Sugano Homo sapiens cDNA library"

ORIGIN
Query Match 68.0%; Score 6.8; DB 1; Length 50;
Best Local Similarity 66.7%; Pred. No. 4.5e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: |||: |||
Db 31 GACCGGTCG 39

RESULT 80
AUI07943/c
LOCUS
AUI07943 Sugano Homo sapiens cDNA library EST 28-JAN-2004
DEFINITION
COL08777, mRNA sequence.
ACCESSION
AUI07943
VERSION
AUI07943.1 GI:13557465
KEYWORDS
EST.
SOURCE
Homo sapiens (human)
ORGANISM
Homo sapiens
Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominiidae; Homo.
REFERENCE
1 (bases 1 to 50)
Suzuki, Y., Taira, H., Tsunoda, T., Mizushima-Sugano, J., Sese, J., Hata, H., Ota, T., Isogai, T., Tanaka, T., Morishita, S., Okubo, K., Sakaki, Y., Nakamura, Y., Suyama, A. and Sugano, S.
Diverse transcriptional initiation revealed by fine, large-scale mapping of mRNA start sites
EMBO Rep. 2 (5), 388-393 (2001)

JOURNAL
MEDLINE
PUBMED
COMMENT

Contact: Yutaka Suzuki
Department of Virology
Institute of Medical Science, University of Tokyo
4-6-1, Shirokanedai, Minatoku, Tokyo 108-8639, Japan
Email: yuzuki@ims.u-tokyo.ac.jp
Suzuki, Y., Yoshitomo-Nakagawa, K., Maruyama, K., Suyama, A. and Sugano, S. Construction and characterization of a full length-enriched and a 5'-end-enriched cDNA library. Gene 200 (1-2), 149-156 (1997).

FEATURES
source
1. .50
Location/Qualifiers
/organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/clone="COL08777"
/clone_lib="Sugano Homo sapiens cDNA library"

ORIGIN
Query Match 68.0%; Score 6.8; DB 1; Length 50;
Best Local Similarity 66.7%; Pred. No. 4.5e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: |||: |||
Db 38 GACCGGTCG 30

RESULT 81
CC325469/c
LOCUS
CC325469 TEA087 BayGenomics Gene Trap Library pGTLxf Mus musculus cDNA, mRNA sequence.
DEFINITION
CC325469
VERSION
CC325469.1 GI:30719527
KEYWORDS
GSS.
SOURCE
Mus musculus (house mouse)
ORGANISM
Mus musculus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
REFERENCE
1 (bases 1 to 50)
http://baygenomics.ucsf.edu/
TITLE
http://baygenomics.ucsf.edu/
JOURNAL
Unpublished (2001)
COMMENT
Contact: BayGenomics
Bay Area Functional Genomics Consortium (BayGenomics)
Email: info@baygenomics.ucsf.edu
Sequence tag generated by 5' RACE of total RNA from gene trap ES cell line. ES cell lines harboring insertion mutation of target gene are available upon request from BayGenomics. Annotation information available from
http://baygenomics.ucsf.edu/cgi-bin/BaySearch.py?OPTION=EXACT&TYPE=CELL LINE&KEY=TEA087
CELL LINE=TEA087
Class: Gene Trap.
Location/Qualifiers
1. .50
/organism="Mus musculus"
/mol_type="mRNA"
/strain="129 ola"
/db_xref="taxon:10090"
/sex="Male"
/cell_type="Embryonic stem cell"
/clone_lib="BayGenomics Gene Trap Library pGTLxf"
/notes="Vector: pGTLxf"

ORIGIN
Query Match 68.0%; Score 6.8; DB 8; Length 50;
Best Local Similarity 66.7%; Pred. No. 4.5e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: |||: |||
Db 21 GATCGGTCG 13

RESULT 82
AL752914
LOCUS
AL752914 Arabidopsis thaliana T-DNA flanking sequence GK-018C06-013490, genomic survey sequence.
DEFINITION
AL752914
VERSION
AL752914.1 GI:21485412
KEYWORDS
GSS.
SOURCE
Arabidopsis thaliana (thale cress)
ORGANISM
Arabidopsis thaliana
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; rosids; eurosids II; Brassicales; Brassicaceae; Arabidopsi.
REFERENCE
1
Li, Y., Rosso, M.G., Strizhov, N., Viehoever, P. and Weissshaar, B.
GABI-Kat SimpleSearch: a flanking sequence tag (FST) database for the identification of T-DNA insertion mutants in Arabidopsis thaliana
Bioinformatics 19 (11), 1441-1442 (2003)

JOURNAL
MEDLINE
PUBMED

/mol_type="mRNA"
 /db_xref="taxon:9606"
 /clone="IMAGE:3935700"
 /lab_host="DH10B (T1 phage-resistant)"
 /clone_lib="NIH_MGC_82"
 /notes="Organ: testis; Vector: pDNR-LIB (Clontech); Site 1: SfiI (ggcgctcgcc); Site 2: SfiI (ggccattatggcc); 5' and 3' adaptors were used in cloning as follows: 5' adaptor sequence: 5'-CACGGCCATTATGGCC-3' and 3' adaptor sequence: 5'-ATTCTAGACCGGCGGGCGGCACATG-dT(30)BN-3' (where B = A, C, or G and N = A, C, G, or T). Average insert size 1.35 kb (range 0.9-4.0 kb). 14/15 colonies contained inserts by PCR. This library was enriched for full-length clones and was constructed by Clontech Laboratories (Palo Alto, CA)."

ORIGIN

Query Match 68.0%; Score 6.8; DB 2; Length 51;
 Best Local Similarity 66.7%; Pred. No. 4.5e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANGKTCG 10
 : |||||
 Db 28 TATCGGTCG 36

RESULT 85
 BU067023/c
 LOCUS
 DEFINITION 1614_B06 C1225T Mature perithecia *Gibberella zeae* cDNA, mRNA
 EST.
 ACCESSION BU067023.1 GI:22508212
 VERSION BU067023
 KEYWORDS EST.
 SOURCE *Gibberella zeae*
 ORGANISM *Gibberella zeae*
 Eukaryota; Fungi; Ascomycota; Pezizomycotina; Sordariomycetes; Hypocreomycetidae; Hypocreales; Nectriaceae; *Gibberella*.
 REFERENCE 1 (bases 1 to 51)
 AUTHORS Trail,F., Xu,J.-R., San Miguel,P., Halgren,R.G. and Kistler,H.C.
 TITLE Analysis of expressed sequence tags from *Gibberella zeae* (anamorph *Fusarium graminearum*)
 JOURNAL Fungal Genet. Biol. 38 (2), 187-197 (2003)
 MEDLINE 22508120
 PUBMED 12620255
 COMMENT Contact: Frances Trail
 Department of Plant Biology
 Michigan State University
 East Lansing, MI 48824, USA
 Tel: 517 432 2939
 Fax: 517 353 1926
 Email: trail@msu.edu.

FEATURES

source
 1..51
 /organism="Gibberella zeae"
 /mol_type="mRNA"
 /strain="NRRL 31084"
 /db_xref="taxon:5518"
 /clone_lib="Mature perithecia"
 /note="Vector: ZipLox; Site_1: NotI; Site_2: SalI"

ORIGIN

Query Match 68.0%; Score 6.8; DB 5; Length 51;
 Best Local Similarity 66.7%; Pred. No. 4.5e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANGKTCG 10
 : |||||
 Db 24 TAGCGGTCG 16

RESULT 86

BU583828

LOCUS
 DEFINITION BU583828 51 bp mRNA linear EST 20-SEP-2002
 mail2b09.Y1 McCarrey Eddy 18 20 day sertoli cell Mus musculus cDNA
 clone IMAGE:6369737 5', mRNA sequence.
 ACCESSION BU583828
 VERSION BU583828.1 GI:23257793
 KEYWORDS EST.
 SOURCE Mus musculus (house mouse)
 ORGANISM *Mus musculus*
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; *Mus*.
 REFERENCE 1 (bases 1 to 51)
 AUTHORS McCarrey,J., Eddy,M., Marra,M., Hillier,L., Clifton,S., Pape,D., Martin,J., Wylie,T., Dante,M., Bowers,Y., Theising,B., Gibbons,M., Ritter,E., Tsagarisvili,R., Ronko,I., Maguire,L., Kennedy,S., Bennett,J., Waterston,R. and Wilson,R.
 TITLE NIHES Mouse
 JOURNAL Unpublished (2002)
 COMMENT Contact: McCarrey/Eddy NIHES Mouse
 NIHES Mouse
 Washington University School of Medicine
 4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108, USA
 Tel: 314 286 1800
 Fax: 314 286 1810
 Email: est@watson.wustl.edu
 Library constructed and donated by J. McCarrey, Ph.D. (Southwest Foundation for Biomedical Research, Dept. of Genetics) - excision done by E.M. Eddy, Ph.D. (National Institutes of Health, National Institute of Environmental Health Sciences).
 MGI:2047169
 Seq primer: -40RP from Gibco.

FEATURES

source
 1..51
 /organism="Mus musculus"
 /mol_type="mRNA"
 /db_xref="taxon:10090"
 /clone="IMAGE:6369737"
 /sex="male"
 /tissue_type="sertoli cells"
 /lab_host="DH10B (phage-resistant)"
 /clone_lib="McCarrey Eddy 18 20 day sertoli cell"
 /note="Organ: testis; Vector: pBluescript SK+ (Stratagene); Site 1: EcoRI; Site 2: XhoII; cDNA oligo dt-primerd [5'-(GA)10-ACTAGTCGCGAGTTTTTTTTTT-3'] and directionally cloned using 5' linkers 5'-AATTGCGCAGAG-3' and 5'-CTCGTCCG-3'. Size selection of >400bp material gives average insert size ranging from 1-2 kb. Library was single-stranded phagemids were prepped and tranformed into DH10B. Library constructed and donated by J. McCarrey, Ph.D. (Southwest Foundation for Biomedical Research, Dept. of Genetics); excision done by E.M. Eddy, Ph.D. (National Institutes of Health, National Institute of Environmental Health Sciences)."

ORIGIN

Query Match 68.0%; Score 6.8; DB 5; Length 51;
 Best Local Similarity 66.7%; Pred. No. 4.5e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANGKTCG 10
 : |||||
 Db 4 GACCGGTCG 12

RESULT 87

CD743956/c

LOCUS
 DEFINITION CD743956 51 bp mRNA linear EST 25-JUN-2004
 IRB15_F11 IRB15 092 Infected Rat Blood-fed (IRB) An.gam. 30 hr
 Abdomen Library Anopheles gambiae cDNA 5', mRNA sequence.
 ACCESSION CD743956
 VERSION CD743956.1 GI:49247887
 KEYWORDS EST.
 SOURCE *Anopheles gambiae* (African malaria mosquito)

```

ORGANISM  Anopheles gambiae
Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
Neoptera; Endopterygota; Diptera; Nematocera; Culicoidea;
Anopheles.
REFERENCE 1 (bases 1 to 51)
AUTHORS  Dana,A.N., Lobo,N.F., Hillenmeyer,M.E. and Collins,F.H.
TITLE     Hematophagy-associated gene expression patterns in adult female
JOURNAL   Anopheles gambiae mosquitoes
COMMENT   Unpublished (2003)
          Contact: Dana A.N.
          Frank H. Collins Laboratory
          University of Notre Dame
          Center for Tropical Disease Research and Training, Dept. of Biol.
          Sci., Notre Dame, IN 46556, USA
          Tel: 574 - 631 - 3241
          Fax: 574 - 631 - 3996
          Email: adana@nd.edu
PCR Primers
FORWARD: ctcggaagcgcgcattgtgttg
BACKWARD: atcagactcactataggcgcaattggc
Seq primer: ctcggaagcgcgcattgtgttg.
FEATURES  Location/Qualifiers
           1..51
           /organism="Anopheles gambiae"
           /mol_type="mRNA"
           /strain="4Arr"
           /db_xref="taxon:7165"
           /sex="female"
           /tissue_type="Abdomens"
           /dev_stages="Female adult 5-7 days post eclosion"
           /lab_host="E. coli XLI-Blue"
           /clone_lib="Infected Rat Blood-fed (IRB) An.gam. 30 hr
           Abdomen Library"
           /note="Vector: lamdatripleX2 (Clontech); Site 1: Sfi IA;
           Site 2: Sfi IB; Plasmodium berghei-infected rat blood-fed
           adult female An. gambiae mosquitoes were flash frozen
           after a 30 hr incubation of adult mosquitoes at 19
           degrees Celsius. Total RNA extracted from abdomens
           separated from remaining carcass. CDNA inserts >500 bp
           cloned directionally into ltripleX2; Sfi IA site is 5',
           Non-normalized and Non-amplified phagemid library. Single
           pass sequencing reactions from 5' end."
ORIGIN
Query Match      68.0%; Score 6.8; DB 6; Length 51;
Best Local Similarity 66.7%; Pred. No. 4.5e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 2 DANCCKTCG 10
   :|||:||||
Db 46 GAGCGTTCG 38

RESULT 88
LOCUS      CN870791/c
DEFINITION 001205AAOA008273HT (AAOA) Royal Gala phloem Malus x domestica cDNA
ACCESSION  CN870791.1 GI:48128640
VERSION    EST.
KEYWORDS   Malus x domestica (cultivated apple)
ORGANISM   Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots;
rosids; eurosids I; Rosales; Rosaceae; Maloideae; Malus.
REFERENCE  1 (bases 1 to 51)
AUTHORS    Beuning,L., Bowen,J., Crowhurst,R., Gleave,A., Janssen,B.,
McArtney,S., Newcomb,R., Ross,G., Snowden,K., Walton,E. and Yauk,Y.
TITLE      HortResearch Apple EST Project
JOURNAL    Unpublished (2004)
COMMENT    Contact: Gleave,A.
           Sequencing Facility

The Horticulture and Food Research Institute of New Zealand Ltd
120 Mt Albert Rd, Mt Albert, Auckland, New Zealand
Tel: 00 64 09 815 4200
Fax: 00 64 09 815 4201
Email: est@hortresearch.co.nz.
FEATURES  Location/Qualifiers
           1..51
           /organism="Malus x domestica"
           /mol_type="mRNA"
           /db_xref="taxon:3750"
           /clone="AAOA008273"
           /tissue_type="Phloem, scrapings from inside of bark mature
           wood"
           /clone_lib="(AAOA) Royal Gala phloem"
           /note="Vector: pBluescript SK(-); Library sequenced by
           Genesis Research & Development"
ORIGIN
Query Match      68.0%; Score 6.8; DB 7; Length 51;
Best Local Similarity 66.7%; Pred. No. 4.5e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 2 DANCCKTCG 10
   :|||:||||
Db 44 GACGTTTCG 36

RESULT 89
LOCUS      BX215107
DEFINITION  Danio rerio genomic clone DKEY-266H14, genomic survey sequence.
ACCESSION  BX215107
VERSION    BX215107.1 GI:28046993
KEYWORDS   GSS.
SOURCE     Danio rerio (zebrafish)
ORGANISM   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Actinopterygii; Neopterygii; Teleostei; Ostariophysi;
Cypriniformes; Cyprinidae; Danio.
REFERENCE  1 (bases 1 to 51)
AUTHORS    Humphray,S.J., Huckle,E. and Durham,J.L.
TITLE      Direct Submission
JOURNAL    Submitted (27-JAN-2003) The Sanger Institute, Wellcome Trust Genome
Campus, Hinxton, Cambridgeshire, CB10 1SA, UK. E-mail enquiries:
humquerry@sanger.ac.uk Unpublished
This sequence was generated from the T7 end of BAC 266H14. 266H14
is part of the Dantokoey BAC Library created by R. Plasterk and N.V.
Keygene. Further details:
http://www.sanger.ac.uk/Projects/D_rerio/.
FEATURES  Location/Qualifiers
           1..51
           /organism="Danio rerio"
           /mol_type="genomic DNA"
           /db_xref="taxon:7955"
           /clone="DKEY-266H14"
           /tissue_type="Testis"
           /note="Vector pIndigoBAC-536"
ORIGIN
Query Match      68.0%; Score 6.8; DB 9; Length 51;
Best Local Similarity 66.7%; Pred. No. 4.5e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 2 DANCCKTCG 10
   :|||:||||
Db 34 AAACGCTCG 42

RESULT 90
LOCUS      CC884865/c
DEFINITION  SALK 144687.15.95.x Arabidopsis thaliana TDNA insertion lines
Arabidopsis thaliana genomic clone SALK_144687.15.95.x, genomic

```

survey sequence.

ACCESSION
CC884865
VERSION
CC884865.1 GI:33361221
KEYWORDS
GSS.
SOURCE
Arabidopsis thaliana (chale cress)

ORGANISM
Arabidopsis thaliana

REFERENCE
AUTHORS
Alonso,J.M., Leisse,T.J., Barajas,P., Chen,H., Cheuk,R.,
Gadrinab,C., Jeske,A., Karnes,M., Kim,C.J., Parker,H., Prednis,L.,
Shinn,P., Zimmerman,J. and Ecker,J.R.
TITLE
A Sequence-Indexed Library of Insertion Mutations in the
JOURNAL
Arabidopsis Genome
COMMENT
Unpublished (2001)

Contact: Joseph R. Ecker
Salk Institute Genomic Analysis Laboratory (SIGnAL)
The Salk Institute for Biological Studies
10010 N. Torrey Pines Road, La Jolla, CA 92037, USA
Tel: 858 453 4100 x1752
Fax: 858 558 6379
Email: eckers@salk.edu

This is single pass sequence recovered from the left border of
TDNA. This sequence lies within 300 bases of the 3' end of
At5g37130.

Class: TDNA tagged.

Location/Qualifiers

1. .51

/organism="Arabidopsis thaliana"

/mol_type="genomic DNA"

/ecotype="Col-0"

/db_xref="taxon:3702"

/clone_lib="Arabidopsis thaliana TDNA insertion lines"

/note="PCR was performed on Arabidopsis thaliana lines

each of which contains one or more TDNA insertion

elements. The resultant fragment for each line was

directly sequenced to determine the genomic sequence at

the site of insertion. Details of the protocols used can

be found at http://signal.salk.edu/tdna_protocols.html"

Class: TDNA tagged.

Location/Qualifiers

1. .51

/organism="Arabidopsis thaliana"

/mol_type="genomic DNA"

/ecotype="Col-0"

/db_xref="taxon:3702"

/clone_lib="Arabidopsis thaliana TDNA insertion lines"

/note="PCR was performed on Arabidopsis thaliana lines

each of which contains one or more TDNA insertion

elements. The resultant fragment for each line was

directly sequenced to determine the genomic sequence at

the site of insertion. Details of the protocols used can

be found at http://signal.salk.edu/tdna_protocols.html"

ORIGIN

Query Match

Best Local Similarity 68.0%; Score 6.8; DB 9; Length 51;

Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 2 DANCCKTCG 10

:|:|:|:|

Db 34 AACGCTTCG 26

RESULT 91

CG712445/c

LOCUS

DEFINITION 1119027A07.x1 1119 - RescueMu Grid AA Zea mays genomic, genomic

survey sequence.

ACCESSION CG712445

VERSION CG712445.1 GI:37738351

KEYWORDS GSS.

SOURCE Zea mays

ORGANISM Zea mays

REFERENCE 1 (bases 1 to 51)

Maize genomic sequences found using engineered RescueMu transposon

Walbot,V.

Unpublished (2001)

Contact: Walbot V

Department of Biological Sciences

Stanford University

855 California Ave, Palo Alto, CA 94304, USA

REFERENCE 1 (bases 1 to 51)

Maize genomic sequences found using engineered RescueMu transposon

Walbot,V.

Unpublished (2001)

Contact: Walbot V

Department of Biological Sciences

Stanford University

855 California Ave, Palo Alto, CA 94304, USA

Tel: 650 723 2227

Fax: 650 725 8221

Email: walbot@stanford.edu

Possible ligation site so sequence was trimmed. Post-ligation
sequence submitted separately.

Plate: 1119027 row: A column: 07

Class: transposon-tagged.

Location/Qualifiers

1. .51

/organism="Zea mays"

/mol_type="genomic DNA"

/cultivar="mixed background W23/A188/B73/K55"

/db_xref="taxon:4577"

/tissue_type="leaf"

/dev_stage="adult"

/lab_host="DH10B"

/clone_lib="1119 - RescueMu Grid AA"

/note="Organ: leaf; Vector: RescueMu (engineered from

pBlueScript backbone); Site 1: BamHI; Site 2: BglII;

RescueMu is a 4.9 kb, modified maize Mu transposon

designed to allow plasmid rescue from total genomic DNA.

Mu elements insert preferentially into transcription

units. For more information on RescueMu, go to the web

site 'www.zmdb.iastate.edu' and follow the links for

'RescueMu.' Grid AA was grown at UC San Diego in 2002. DNA

was extracted from leaf strips, double digested using

BamHI and BglII, and ligated to form circular plasmids.

DH10B cells were transformed and then screened on LB

plates with ampicillin."

ORIGIN

Query Match

Best Local Similarity 68.0%; Score 6.8; DB 9; Length 51;

Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 2 DANCCKTCG 10

:|:|:|:|

Db 14 TACCGCTCG 6

RESULT 92

AI440320/c

LOCUS

DEFINITION tc82910.x1 NCI_CGAP CLL1 Homo sapiens cDNA clone IMAGE:2072706 3,

similar to SW:CA44_RABIT P55787 COLLAGEN ALPHA 4(IV) CHAIN ;, mRNA

sequence.

ACCESSION AI440320

VERSION AI440320.1 GI:4281884

KEYWORDS EST.

SOURCE Homo sapiens (human)

ORGANISM Homo sapiens

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE 1 (bases 1 to 52)

NCI-CGAP <http://www.ncbi.nlm.nih.gov/ncicgap>.

National Cancer Institute, Cancer Genome Anatomy Project (CGAP),

Tumor Gene Index

Unpublished (1997)

Contact: Robert Strausberg, Ph.D.

Email: cgapbs-x@mail.nih.gov

Tissue Procurement: Ash Alizadeh, John Byrd, M.D., Mike Grever,

M.D., Louis M. Staudt, M.D., Ph.D.

cDNA Library Preparation: M. Bento Soares, Ph.D.

cDNA Library Arrayed by: Greg Lennon, Ph.D.

DNA Sequencing by: Washington University Genome Sequencing Center

Clone distribution: NCI-CGAP clone distribution information can be

found through the I.M.A.G.E. Consortium/LLNL at:

www-bio.llnl.gov/bbrp/image/image.html

Trace considered overall poor quality

Insert Length: 796 Std Error: 0.00

Seq primer: -40UP from Gibco

High quality sequence stop: 1.

FEATURES
source

Location/Qualifiers
1. .52
/organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/clone="IMAGE:2072706"
/tissue_type="B-cell, chronic lymphocytic leukemia"
/lab_host="DH10B"
/clone_lib="NCI CGAP CLL1"
/note="Vector: pT73D-Pac (Pharmacia) with a modified polylinker; Site 1: Not I; Site 2: Eco RI; 1st strand cDNA was primed with a Not I - oligo(dT) primer [5' TGTTACCATCTGAAGTGGAGCGCCCGCATGCTTTTTTTTTTTTTTTTTT T 3']; double-stranded cDNA was ligated to Eco RI adaptors (Pharmacia), digested with Not I and cloned into the Not I and Eco RI sites of the modified pT773 vector. Library is normalized, and was constructed by Bento Soares and M. Fatima Bonaldo."

ORIGIN

Query Match 68.0%; Score 6.8; DB 1; Length 52;
Best Local Similarity 66.7%; Pred. No. 4.5e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGKTCG 10
:|||||
DB 42 GAGCGGTCG 34

RESULT 93

CB379027/c
LOCUS
DEFINITION
rql6h10.y1 Heterodera glycines J3 Heterodera glycines cDNA 5', mRNA
sequence.
ACCESSION
CB379027
KEYWORDS
SOURCE
ORGANISM
Heterodera glycines
Heterodera glycines
Eukaryota; Metazoa; Nematoda; Chromadorea; Tylenchida; Tylenchida;
Tylenchoidea; Heteroderidae; Heteroderinae; Heterodera.
1 (bases 1 to 52)

REFERENCE
AUTHORS

McCarter, J., Clifton, S., Chiapelli, B., Pape, D., Martin, J.,
Wylie, T., Dante, M., Marra, M., Hillier, L., Kucaba, T., Theising, B.,
Bowers, Y., Gibbons, M., Ritter, E., Bennett, J., Franklin, C.,
Tsagarisvili, R., Ronko, I., Kennedy, S., Maguire, L., Beck, C.,
Underwood, K., Steptoe, M., Allen, M., Person, B., Swaller, T.,
Harvey, N., Schurk, R., Kohn, S., Shin, T., Jackson, Y., Cardenas, M.,
McCann, R., Waterston, R. and Wilson, R.
The Washington Univ. Nematode EST Project, 1999
Unpublished (1999)

TITLE
JOURNAL
COMMENT

Contact: McCarter JP
The Washington Univ. Nematode EST Project, 1999
Washington University School of Medicine
4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108, USA
Tel: 314 286 1800
Fax: 314 286 1810
Email: est@watson.wustl.edu

This library was generated by cloning cDNAs directionally into
Uni-ZAP(Stratagene) (T3 primer/EcoRI are at the 5'-end and T7/XhoI
are at the 3'-end). The library was excised [now in pBluescript
SK(+)] and normalized (Bonaldo et al 1996 Genome Research
6:791-806). Library constructed by Thomas Baum (tbaum@iastate.edu),
Iowa State University, Plant Pathology Department and Jeff
McDermott (jpmcd@mstate.edu).

Putative full length read
The vector to vector length is 53
Seq primer: T3 from Gibco.

FEATURES
source

1. .52
/organism="Heterodera glycines"
/mol_type="mRNA"
/db_xref="taxon:51029"

/sex="mixed"

/tissue_type="whole organism"
/dev_stage="3rd stage juvenile"
/lab_host="DH10B"
/clone_lib="Heterodera glycines J3"
/note="Vector: pBluescript SK+ (Stratagene); Site 1: XhoI;
Site 2: EcoRI. This library was generated by cloning cDNAs
directionally into Uni-ZAP(Stratagene) (T3 primer/EcoRI
are at the 5'-end and T7/XhoI are at the 3'-end). The
library was excised [now in pBluescript SK(+)] and
normalized (Bonaldo et al 1996 Genome Research 6:791-806).
Library constructed by Thomas Baum (tbaum@iastate.edu),
Iowa State University, Plant Pathology Department and Jeff
McDermott (jpmcd@mstate.edu)."

ORIGIN

Query Match 68.0%; Score 6.8; DB 6; Length 52;
Best Local Similarity 66.7%; Pred. No. 4.5e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGKTCG 10
:|||||
DB 24 GATCGTTCG 16

RESULT 94

CR411873/c
LOCUS
DEFINITION
CR411873 XGC-tailbud Xenopus tropicalis cDNA clone TTBA063g09 5',
mRNA sequence.

ACCESSION
CR411873
VERSION
CR411873.1 GI:48680120

KEYWORDS

SOURCE
Xenopus tropicalis (western clawed frog)

ORGANISM

Xenopus tropicalis
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Amphibia; Batrachia; Anura; Mesobatrachia; Pipidae;
Xenopodinae; Xenopus; Silurana.

REFERENCE

1 (bases 1 to 52)
Croning, M.D.R., Ashurst, J.L., Taylor, R., Garrett, N. and Rogers, J.
Sanger Xenopus tropicalis EST project 2001 (2004)
Unpublished (2004)

AUTHORS

CONTACT: Croning MDR

TITLE

JOURNAL
COMMENT
Hinxton, Cambridgeshire, CB10 1SA, UK
Email: trop@sanger.ac.uk

Sanger Xenopus tropicalis EST project 2001

TRPOCALIS_SEQUENCE ID: TTBA063g09.piksp6

This sequence is from a Xenopus Gene Collection (XGC) library
constructed by Nigel Garrett.

Seq primer: SP6.

FEATURES

Location/Qualifiers

1. .52
/organism="Xenopus tropicalis"

/mol_type="mRNA"

/db_xref="taxon:8364"

/clone="TTBA063g09"

/dev_stage="tailbud (stage 28-30)"

/lab_host="Escherichia coli DH10B."

/clone_lib="XGC-tailbud"

/note="Vector: pCS107; Site 1: EcoRI; Site 2: NotI; cDNA
was oligo dt primed from 5ug of poly A+ RNA from tailbud.
EcoRI-NotI cut cDNA was then ligated into pCS107 with
EcoRI at the 5' end and NotI at the 3' end."

ORIGIN

Query Match 68.0%; Score 6.8; DB 7; Length 52;
Best Local Similarity 66.7%; Pred. No. 4.5e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGKTCG 10
:|||||
DB 11 GAACGTCG 3

```

RESULT 95
AZ921909/c
LOCUS
DEFINITION HRCot3G06 Sorghum bicolor HRCot Sorghum bicolor genomic similar to
Sorghum bicolor Retrosor-6 retroelement, genomic survey sequence.
ACCESSION
VERSION AZ921909
KEYWORDS
SOURCE
ORGANISM Sorghum bicolor (sorghum)
REFERENCE
AUTHORS Peterson,D.G., Schulze,S.R., Sciarra,B.B., Lee,S.A., Bowers,J.E.,
Nagel,A., Jiang,N., Tibbitts,D.C., Wessler,S.R. and Paterson,A.H.
TITLE Integration of Cot analysis, DNA cloning, and high-throughput
sequencing facilitates genome characterization and gene discovery
JOURNAL Genome Res. 12 (5), 795-807 (2002)
MEDLINE 2192826
PUBMED 11977346
COMMENT Contact: Peterson DG
Plant Genome Mapping Laboratory
University of Georgia
Room 162, Riverbend Research Bldg., 110 Riverbend Rd., Athens, GA
30602, USA
Tel: 706-583-0167
Fax: 706-583-0160
Email: dgp@arches.uga.edu
Class: Hydroxyapatite-fractionated DNA.
FEATURES
source
1..52
/organism="Sorghum bicolor"
/mol_type="genomic DNA"
/cultivar="BTx623"
/db_xref="taxon:4558"
/tissue_type="leaves"
/dev_stages="seedling"
/clone_lib="Sorghum bicolor HRCot"
/note="Vector: pGEM-TA-Easy; A Cot analysis was performed
for the sorghum genome. Based on the resulting Cot curve,
hydroxyapatite chromatography was used to isolate
'highly-repetitive' (HR), 'moderately-repetitive' (MR),
and 'single/low-copy' (SL) sequence components from
sheared genomic DNA. The three repetition-based DNA
components were cloned into E. coli to produce HRCot,
MRCot, and SLcot genomic libraries. Blotting and
sequencing data indicates that each library is
representative of the component from which it was derived.
Putative ID listings given for sequences are based on
comparison (blastn) with sequences in the NCBI Nr
Database. Only the primary match is given (all primary E
values are < or = 1.00E-5). In no instance does a 'Cot
clone' contain the complete sequence of its putative Nr
match."
ORIGIN
Query Match 68.0%; Score 6.8; DB 8; Length 52;
Best Local Similarity 66.7%; Pred. No. 4.5e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
Qy 2 DANCCKTCG 10
Db 39 AAGCGTTCG 31
RESULT 96
BZ287252
LOCUS
DEFINITION SALK_020622.33.55.x Arabidopsis thaliana TDNA insertion lines
Arabidopsis thaliana genomic clone SALK_020622.33.55.x, genomic
survey sequence.
ACCESSION
VERSION BZ287252.1 GI:24324873
KEYWORDS
SOURCE
ORGANISM Arabidopsis thaliana (thale cress)
REFERENCE
AUTHORS Alonso,J.M., Leisse,T.J., Barajas,P., Chen,H., Cheuk,R.,
Gadrinab,C., Jeske,A., Karnes,M., Kim,C.J., Parker,H., Prednis,L.,
Shinn,P., Zimmerman,J. and Ecker,J.R.
TITLE A Sequence-Indexed Library of Insertion Mutations in the
Arabidopsis Genome
JOURNAL Unpublished (2001)
COMMENT Contact: Joseph R. Ecker
Salk Institute Genomic Analysis Laboratory (SIGnAL)
The Salk Institute for Biological Studies
10010 N. Torrey Pines Road, La Jolla, CA 92037, USA
Tel: 858 453 4100 x1752
Fax: 858 558 6379
Email: ecker@salk.edu
This is single pass sequence recovered from the left border of
TDNA. This sequence lies within an annotated exon of At3g58650.
Class: TDNA tagged.
FEATURES
Location/Qualifiers
1..52
/organism="Arabidopsis thaliana"
/mol_type="genomic DNA"
/ecotype="Col-0"
/db_xref="taxon:3702"
/clone="SALK_020622.33.55.x"
/clone_lib="Arabidopsis thaliana TDNA insertion lines"
/note="PCR was performed on Arabidopsis thaliana lines
each of which contains one or more TDNA insertion
elements. The resultant fragment for each line was
directly sequenced to determine the genomic sequence at
the site of insertion. Details of the protocols used can
be found at http://signal.salk.edu/tdna_protocols.html"
ORIGIN
Query Match 68.0%; Score 6.8; DB 8; Length 52;
Best Local Similarity 66.7%; Pred. No. 4.5e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
Qy 2 DANCCKTCG 10
Db 11 AAGCGTTCG 19
RESULT 97
CR359266
LOCUS
DEFINITION Arabidopsis thaliana T-DNA flanking sequence GK-734G07-025441,
genomic survey sequence.
ACCESSION
VERSION CR359266.1 GI:45542188
KEYWORDS
SOURCE
ORGANISM Arabidopsis thaliana (thale cress)
REFERENCE
AUTHORS Li,Y., Rosso,M.G., Strizhov,N., Viehoever,P. and Weissshaar,B.
TITLE GABI-Kat SimpleSearch: a flanking sequence tag (FST) database for
the identification of T-DNA insertion mutants in Arabidopsis
thaliana
JOURNAL Bioinformatics 19 (11), 1441-1442 (2003)
MEDLINE 22755829
PUBMED 12874060
REFERENCE 2

```

AUTHORS Rosso,M.G., Li,Y., Strizhov,N., Reiss,B., Dekker,K. and Weisshaar,B.

TITLE An Arabidopsis thaliana T-DNA mutagenized population (GABI-Kat) for flanking sequence tag-based reverse genetics

JOURNAL Plant Mol. Biol. 53 (1-2), 247-259 (2003)

MEDLINE 23117147

PUBMED 14756321

REFERENCE 3

AUTHORS Strizhov,N., Li,Y., Rosso,M.G., Viehoever,P., Dekker,K.A. and Weisshaar,B.

TITLE High-throughput generation of sequence indexes from T-DNA mutagenized Arabidopsis thaliana lines

JOURNAL Biotechniques 35 (6), 1164-1168 (2003)

PUBMED 14682050

REFERENCE 4 (bases 1 to 52)

AUTHORS Rosso,M.G., Li,Y., Strizhov,N. and Weisshaar,B.

TITLE Direct Submission

JOURNAL Submitted (31-MAR-2004) Weisshaar B., Max-Planck-Institut fuer Zuechtungsforschung, Carl-von-Linne-Weg 10, Koeln, 50829, Germany

COMMENT This sequence has been recovered from the left border of the T-DNA. It indicates an insertion close to or within gene At1g20960. Details on the protocols used for generation of the sequence are described in References 1-3. The sequences are generated at the MPI for Plant Breeding Research in the context of the GABI-Kat project. GABI-Kat is part of the German Plant Genomics program designated 'GABI'. Information on line availability can be found at: <http://www.mpiz-koeln.mpg.de/GABI-Kat/>.

FEATURES source

1..52

/organism="Arabidopsis thaliana"

/mol_type="genomic DNA"

/strain="Columbia 0"

/db_xref="taxon:3702"

/clones="GK-734G07-025441"

/clone_lib="Arabidopsis thaliana T-DNA insertion lines"

/ecotype="Col-0"

/notes="PCR was performed on DNA from Arabidopsis thaliana plants (Ti) which were transformed with the T-DNA from vector pGAB11 (GenBank accession number: AV529716). The lines contain one or more T-DNA insertions. The DNA fragment(s) resulting from the PCR were directly sequenced to determine the genomic sequence flanking the insertion. T-DNA derived sequences were removed."

ORIGIN

Query Match 68.0%; Score 6.8; DB 9; Length 52;

Best Local Similarity 66.7%; Pred. No. 4.5e+05;

Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10

:|||:|

Db 18 TATCGGTCG 26

RESULT 98

TA27H11Q/c

LOCUS 52 bp DNA linear GSS 13-DEC-2000

DEFINITION T. brucei sheared genomic DNA clone 27h11, reverse sequence, genomic survey sequence.

ACCESSION AL453630

VERSION AL453630.1 GI:11851028

KEYWORDS GSS.

SOURCE Trypanosoma brucei

ORGANISM Trypanosoma brucei

REFERENCE 1 (bases 1 to 52)

AUTHORS Hall,N., Bowman,S., Lennard,N.J., Doggett,J., Atkin,R., Chillingworth,C., Ormond,D., Harris,B., El-Sayed,N., Hou,L., Melville,S.E., Rajandream,M.A. and Barrell,B.G.

TITLE Direct Submission

JOURNAL Submitted (10-DEC-2000) Trypanosoma brucei genome sequencing project, Sanger Centre, The Wellcome Trust Genome Campus, Hinxton,

Cambridge CB10 1SA, E-mail: barrell@sanger.ac.uk and nhl@sanger.ac.uk

COMMENT Constructed at the Institute for Genomic Research (TIGR), Rockville, MD. Genomic DNA isolated from a cloned population of Trypanosoma brucei (TREU927/4 GUTat 10.1) was mechanically sheared to give a tight size distribution (4 kb). The v + i method used for the library construction is described in detail in Smith, H. and Venter, J.C. (Making small insert libraries for whole genome shotgun sequencing projects. In Genome Sequencing: A Practical Approach, eds. M. Vaudin and B. Barrell, Oxford University Press, 1999).

Email: neilsayed@tigr.org

Details of T. brucei sequencing at the Sanger Centre are available at http://www.sanger.ac.uk/Projects/T_brucei/.

FEATURES source

1..52

/organism="Trypanosoma brucei"

/mol_type="genomic DNA"

/strain="TREU927"

/db_xref="taxon:5691"

/clone="27h11"

ORIGIN

Query Match 68.0%; Score 6.8; DB 9; Length 52;

Best Local Similarity 66.7%; Pred. No. 4.5e+05;

Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10

:|||:|

Db 26 TAACGGTCG 18

RESULT 99

CC886264

LOCUS 52 bp DNA linear GSS 31-JUL-2003

DEFINITION SALK_148394.24.40.x Arabidopsis thaliana T-DNA insertion lines Arabidopsis thaliana genomic clone SALK_148394.24.40.x, genomic survey sequence.

ACCESSION CC886264

VERSION CC886264.1 GI:33362620

KEYWORDS GSS.

SOURCE Arabidopsis thaliana (thale cress)

ORGANISM Arabidopsis thaliana

REFERENCE 1 (bases 1 to 52)

AUTHORS Alonso,J.M., Leisse,T.J., Barajas,P., Chen,H., Cheuk,R., Gadriab,C., Jeske,A., Karnes,M., Kim,C.J., Parker,H., Prednis,L., Shinn,P., Zimmerman,J. and Ecker,J.R.

TITLE A Sequence-Indexed Library of Insertion Mutations in the Arabidopsis Genome

JOURNAL Unpublished (2001)

COMMENT Contact: Joseph R. Ecker

The Salk Institute Genomic Analysis Laboratory (SIGNAL)

The Salk Institute for Biological Studies

10010 N. Torrey Pines Road, La Jolla, CA 92037, USA

Tel: 858 453 4100 x1752

Fax: 858 558 6379

Email: ecker@salk.edu

This is single pass sequence recovered from the left border of TDNA.

FEATURES source

1..52

/organism="Arabidopsis thaliana"

/mol_type="genomic DNA"

/ecotype="Col-0"

/db_xref="taxon:3702"

/clone="SALK_148394.24.40.x"

/clone_lib="Arabidopsis thaliana T-DNA insertion lines"

/notes="PCR was performed on Arabidopsis thaliana lines each of which contains one or more TDNA insertion

elements. The resultant fragment for each line was directly sequenced to determine the genomic sequence at the site of insertion. Details of the protocols used can be found at http://signal.salk.edu/tdna_protocols.html

ORIGIN

Query Match 68.0%; Score 6.8; DB 9; Length 52;
 Best Local Similarity 66.7%; Pred. No. 4.5e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
 QY 2 DANGKTCG 10
 : |||||
 Db 8 AACCGTCG 16

RESULT 100
 CL302626/c
 LOCUS
 DEFINITION CL302626 GGTC Gene Trap Library GV07C05 Mus musculus cDNA clone
 G063B06, mRNA sequence.
 ACCESSION CL302626
 VERSION
 KEYWORDS
 SOURCE CL302626.1 GI:42743455
 GSS.
 ORGANISM Mus musculus (house mouse)
 Mus musculus
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Mus.
 1 (bases 1 to 52)
 Hansen, J., Floss, T., van Sloun, P., Fuchtbauer, E.M., Vauti, F.,
 Arnold, H.H., Schnutgen, F., Wurst, W., Von Melchner, H. and Ruiz, P.
 A large-scale, gene-driven mutagenesis approach for the functional
 analysis of the mouse genome
 Proc. Natl. Acad. Sci. U.S.A. 100 (17), 9918-9922 (2003)
 22810117
 MEDLINE
 PUBMED 12904583
 COMMENT
 Contact: GGTC
 German Genetrap Consortium (GGTC)
 Email: info@genetrap.de
 U3CEO gene trap. Sequence tag generated by 5'RACE. Additional
 sequence information can be found at:
 'http://genetrap.gsf.de/project/web_new/database/result_clone.html?
 clone_id=G063B06', ES cell line harboring insertion mutation of
 target gene is available at:
 'http://genetrap.gsf.de/project/web_new/order_clones/howtoorder.htm
 1'. Inhouse Sequence Identifier: 18093
 Class: Gene Trap.

FEATURES

source
 1. .52
 Location/Qualifiers
 /organism="Mus musculus"
 /mol_type="mRNA"
 /strain="129 Sv"
 /db_xref="taxon:10090"
 /clone="G063B06"
 /sex="Male"
 /cell_type="Embryonic stem cell"
 /cell_line="ES cells [C57BL/6J x 129SvEvTac] F1"
 /clone_lib="GGTC Gene trap Library GV07C05"
 /note="Vector: U3CEO"

ORIGIN

Query Match 68.0%; Score 6.8; DB 9; Length 52;
 Best Local Similarity 66.7%; Pred. No. 4.5e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
 QY 2 DANGKTCG 10
 : |||||
 Db 43 AACCGTCG 35

Search completed: June 30, 2005, 02:04:34
 Job time : 1728 secs

GenCore version 5.1.6
Copyright (c) 1993 - 2005 CompuGen Ltd.

OM nucleic - nucleic search, using sw model

Run on: June 29, 2005, 16:54:07 ; Search time 857.5 Seconds
(without alignments)
565.075 Million cell updates/sec

Title: us-10-033-243-62

Perfect score: 10

Sequence: 1 ndancgctcg 10

Scoring table: IDENTITY NUC

Gapop 10.0 , Gapext 1.0

Searched: 4708233 segs, 24227607955 residues

Total number of hits satisfying chosen parameters: 9416466

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 100 summaries

Database :

GenEmbl:

1: gb_da:

2: gb_htg:

3: gb_in:

4: gb_om:

5: gb_ov:

6: gb_pat:

7: gb_ph:

8: gb_pl:

9: gb_pr:

10: gb_ro:

11: gb_sts:

12: gb_sy:

13: gb_un:

14: gb_vi:

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	6.8	68.0	10	6	AX592372 Sequence
2	6.8	68.0	10	6	AX592373 Sequence
3	6.8	68.0	10	6	AX592374 Sequence
4	6.8	68.0	10	6	AX592377 Sequence
5	6.8	68.0	10	6	AX592378 Sequence
6	6.8	68.0	10	6	AX592379 Sequence
7	6.8	68.0	10	6	AX592380 Sequence
8	6.8	68.0	10	6	AX592381 Sequence
9	6.8	68.0	10	6	AX592382 Sequence
10	6.8	68.0	10	6	AX592383 Sequence
11	6.8	68.0	10	6	AX592384 Sequence
12	6.8	68.0	10	6	AX592385 Sequence
13	6.8	68.0	10	6	AX592386 Sequence
14	6.8	68.0	10	6	AX592387 Sequence
15	6.8	68.0	10	6	AX592387 Sequence
16	6.8	68.0	10	6	AX592388 Sequence
17	6.8	68.0	10	6	AX592388 Sequence
18	6.8	68.0	10	6	AX592389 Sequence
19	6.8	68.0	10	6	AX592390 Sequence

20	6.8	68.0	10	6	AX592391 Sequence
21	6.8	68.0	10	6	AX592392 Sequence
22	6.8	68.0	10	6	AX592443 Sequence
23	6.8	68.0	11	6	AX592412 Sequence
24	6.8	68.0	11	6	AX592412 Sequence
25	6.8	68.0	11	6	AX592420 Sequence
26	6.8	68.0	11	6	AX592420 Sequence
27	6.8	68.0	11	6	AX592426 Sequence
28	6.8	68.0	12	6	AR176675 Sequence
29	6.8	68.0	12	6	BD192579 Novel pla
30	6.8	68.0	12	6	BD260026 Hybridiza
31	6.8	68.0	12	6	AR437498 Sequence
32	6.8	68.0	12	6	AX001132 Sequence
33	6.8	68.0	12	6	AX592417 Sequence
34	6.8	68.0	12	6	AX592419 Sequence
35	6.8	68.0	12	6	BD064849 Method fo
36	6.8	68.0	13	6	AX592407 Sequence
37	6.8	68.0	13	6	AX592407 Sequence
38	6.8	68.0	13	6	AX592409 Sequence
39	6.8	68.0	13	6	AX592409 Sequence
40	6.8	68.0	13	6	AX592411 Sequence
41	6.8	68.0	13	6	AX592413 Sequence
42	6.8	68.0	13	6	AX592414 Sequence
43	6.8	68.0	13	6	AX592415 Sequence
44	6.8	68.0	13	6	AX592416 Sequence
45	6.8	68.0	13	6	AX592422 Sequence
46	6.8	68.0	13	6	BD091727 Trap vect
47	6.8	68.0	13	6	BD091728 Trap vect
48	6.8	68.0	14	6	BD192321 Hammerhea
49	6.8	68.0	14	6	BD209265 Enzymatic
50	6.8	68.0	14	6	BD209302 Enzymatic
51	6.8	68.0	14	6	AR234359 Sequence
52	6.8	68.0	14	6	AR370464 Sequence
53	6.8	68.0	14	6	AX592408 Sequence
54	6.8	68.0	14	6	AX592408 Sequence
55	6.8	68.0	14	6	AX592410 Sequence
56	6.8	68.0	14	6	AX592421 Sequence
57	6.8	68.0	14	6	AX592421 Sequence
58	6.8	68.0	14	6	AX592428 Sequence
59	6.8	68.0	14	6	AX592429 Sequence
60	6.8	68.0	15	6	AX1090 Oligonucleo
61	6.8	68.0	15	6	AR033261 Sequence
62	6.8	68.0	15	6	AR033565 Sequence
63	6.8	68.0	15	6	AR033566 Sequence
64	6.8	68.0	15	6	AR113083 Sequence
65	6.8	68.0	15	6	AR113387 Sequence
66	6.8	68.0	15	6	AR113388 Sequence
67	6.8	68.0	15	6	AR123874 Sequence
68	6.8	68.0	15	6	AR123875 Sequence
69	6.8	68.0	15	6	AR123876 Sequence
70	6.8	68.0	15	6	AR174756 Sequence
71	6.8	68.0	15	6	BD206994 Enzymatic
72	6.8	68.0	15	6	BD207298 Enzymatic
73	6.8	68.0	15	6	BD207299 Enzymatic
74	6.8	68.0	15	6	BD208767 Enzymatic
75	6.8	68.0	15	6	IS7490 Sequence 27
76	6.8	68.0	15	6	IS7794 Sequence 33
77	6.8	68.0	15	6	IS7795 Sequence 33
78	6.8	68.0	15	6	AR234358 Sequence
79	6.8	68.0	15	6	AR234473 Sequence
80	6.8	68.0	15	6	AR362715 Sequence
81	6.8	68.0	15	6	AX004379 Sequence
82	6.8	68.0	15	6	AX592418 Sequence
83	6.8	68.0	15	6	AX663401 Sequence
84	6.8	68.0	15	6	BD076708 Method of
85	6.8	68.0	16	6	AR176673 Sequence
86	6.8	68.0	16	6	BD260024 Hybridiza
87	6.8	68.0	16	6	CO808457 Sequence
88	6.8	68.0	16	6	AR234357 Sequence
89	6.8	68.0	16	6	AR474438 Sequence
90	6.8	68.0	16	6	AR475502 Sequence
91	6.8	68.0	16	6	AX194461 Sequence
92	6.8	68.0	16	6	AX465411 Sequence

93 6.8 68.0 16 6 AX592321 Sequence
 c 94 6.8 68.0 16 6 AX592321 Sequence
 95 6.8 68.0 16 6 AX592423 Sequence
 96 6.8 68.0 16 6 AX592427 Sequence
 97 6.8 68.0 16 6 AX686160 Sequence
 98 6.8 68.0 17 6 AR040387 Sequence
 c 99 6.8 68.0 17 6 CQ774568 Sequence
 100 6.8 68.0 17 6 CQ774576 Sequence

ALIGNMENTS

RESULT 1
 AX592372
 LOCUS AX592372 10 bp DNA linear PAT 27-JAN-2003
 DEFINITION Sequence 62 from Patent WO02052002.
 ACCESSION AX592372
 VERSION AX592372.1 GI:27950474
 KEYWORDS
 SOURCE synthetic construct
 ORGANISM synthetic construct
 other sequences; artificial sequences.
 REFERENCE 1
 AUTHORS Fearon,K.L. and Dina,D.
 TITLE Immunomodulatory polynucleotides and methods of using the same
 JOURNAL Patent: WO 02052002-A 62 04-JUL-2002;
 Dynavax Technologies Corporation (US)
 FEATURES
 source 1..10
 /organism="synthetic construct"
 /mol_type="unassigned DNA"
 /db_xref="taxon:32630"
 /note="Polynucleotide containing CG"
 misc_feature 1
 /note="n= t, g, c, or 5-bromocytosine"
 misc_feature 4
 /note="n= t or m"

ORIGIN
 Query Match 68.0%; Score 6.8; DB 6; Length 10;
 Best Local Similarity 100.0%; Pred. No. 9.7e+05;
 Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 2 DANCCKTCG 10
 :|||:||||
 Db 2 DANCCKTCG 10

RESULT 2
 AX592373
 LOCUS AX592373 10 bp DNA linear PAT 27-JAN-2003
 DEFINITION Sequence 63 from Patent WO02052002.
 ACCESSION AX592373
 VERSION AX592373.1 GI:27950475
 KEYWORDS
 SOURCE synthetic construct
 ORGANISM synthetic construct
 other sequences; artificial sequences.
 REFERENCE 1
 AUTHORS Fearon,K.L. and Dina,D.
 TITLE Immunomodulatory polynucleotides and methods of using the same
 JOURNAL Patent: WO 02052002-A 63 04-JUL-2002;
 Dynavax Technologies Corporation (US)
 FEATURES
 source 1..10
 /organism="synthetic construct"
 /mol_type="unassigned DNA"
 /db_xref="taxon:32630"
 /note="Polynucleotide containing CG"

ORIGIN
 Query Match 68.0%; Score 6.8; DB 6; Length 10;

Best Local Similarity 66.7%; Pred. No. 9.7e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
 Qy 2 DANCCKTCG 10
 :|||:||||
 Db 2 GAACGTTTCG 10

RESULT 3
 AX592374
 LOCUS AX592374 10 bp DNA linear PAT 27-JAN-2003
 DEFINITION Sequence 64 from Patent WO02052002.
 ACCESSION AX592374
 VERSION AX592374.1 GI:27950476
 KEYWORDS
 SOURCE synthetic construct
 ORGANISM synthetic construct
 other sequences; artificial sequences.
 REFERENCE 1
 AUTHORS Fearon,K.L. and Dina,D.
 TITLE Immunomodulatory polynucleotides and methods of using the same
 JOURNAL Patent: WO 02052002-A 64 04-JUL-2002;
 Dynavax Technologies Corporation (US)
 FEATURES
 source 1..10
 /organism="synthetic construct"
 /mol_type="unassigned DNA"
 /db_xref="taxon:32630"
 /note="Polynucleotide containing CG"

ORIGIN
 Query Match 68.0%; Score 6.8; DB 6; Length 10;
 Best Local Similarity 66.7%; Pred. No. 9.7e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 2 DANCCKTCG 10
 :|||:||||
 Db 2 GAACGTTTCG 10

RESULT 4
 AX592377
 LOCUS AX592377 10 bp DNA linear PAT 27-JAN-2003
 DEFINITION Sequence 67 from Patent WO02052002.
 ACCESSION AX592377
 VERSION AX592377.1 GI:27950479
 KEYWORDS
 SOURCE synthetic construct
 ORGANISM synthetic construct
 other sequences; artificial sequences.
 REFERENCE 1
 AUTHORS Fearon,K.L. and Dina,D.
 TITLE Immunomodulatory polynucleotides and methods of using the same
 JOURNAL Patent: WO 02052002-A 67 04-JUL-2002;
 Dynavax Technologies Corporation (US)
 FEATURES
 source 1..10
 /organism="synthetic construct"
 /mol_type="unassigned DNA"
 /db_xref="taxon:32630"
 /note="Polynucleotide containing CG"

ORIGIN
 Query Match 68.0%; Score 6.8; DB 6; Length 10;
 Best Local Similarity 66.7%; Pred. No. 9.7e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 2 DANCCKTCG 10
 :|||:||||
 Db 2 GAACGTTTCG 10

RESULT 5

AX592378
LOCUS AX592378 10 bp DNA linear PAT 27-JAN-2003
DEFINITION Sequence 68 from Patent WO02052002.
ACCESSION AX592378
VERSION AX592378.1 GI:27950480
KEYWORDS
SOURCE
ORGANISM
synthetic construct
other sequences; artificial sequences.
1
REFERENCE
AUTHORS Fearon,K.L. and Dina,D.
TITLE Immunomodulatory polynucleotides and methods of using the same
JOURNAL Patent: WO 02052002-A 68 04-JUL-2002;
Dynamax Technologies Corporation (US)
FEATURES
source
1. .10
/organism="synthetic construct"
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/db_xref="taxon:32630"
/note="Polynucleotide containing CG"
ORIGIN
Query Match 68.0%; Score 6.8; DB 6; Length 10;
Best Local Similarity 66.7%; Pred. No. 9.7e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
QY 2 DANCCKTCG 10
: |||: |||
Db 2 GACCGTTCG 10
RESULT 6
AX592379
LOCUS AX592379 10 bp DNA linear PAT 27-JAN-2003
DEFINITION Sequence 69 from Patent WO02052002.
ACCESSION AX592379
VERSION AX592379.1 GI:27950481
KEYWORDS
SOURCE
ORGANISM
synthetic construct
other sequences; artificial sequences.
1
REFERENCE
AUTHORS Fearon,K.L. and Dina,D.
TITLE Immunomodulatory polynucleotides and methods of using the same
JOURNAL Patent: WO 02052002-A 69 04-JUL-2002;
Dynamax Technologies Corporation (US)
FEATURES
source
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/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="Polynucleotide containing CG"
ORIGIN
Query Match 68.0%; Score 6.8; DB 6; Length 10;
Best Local Similarity 66.7%; Pred. No. 9.7e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
QY 2 DANCCKTCG 10
: |||: |||
Db 2 GACCGTTCG 10
RESULT 7
AX592380
LOCUS AX592380 10 bp DNA linear PAT 27-JAN-2003
DEFINITION Sequence 70 from Patent WO02052002.
ACCESSION AX592380
VERSION AX592380.1 GI:27950482
KEYWORDS
SOURCE
ORGANISM
synthetic construct
other sequences; artificial sequences.
1
REFERENCE
AUTHORS Fearon,K.L. and Dina,D.
TITLE Immunomodulatory polynucleotides and methods of using the same
JOURNAL Patent: WO 02052002-A 70 04-JUL-2002;
Dynamax Technologies Corporation (US)
FEATURES
source
1. .10
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/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="Polynucleotide containing CG"
ORIGIN
Query Match 68.0%; Score 6.8; DB 6; Length 10;
Best Local Similarity 66.7%; Pred. No. 9.7e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
QY 2 DANCCKTCG 10
: |||: |||
Db 2 GACCGTTCG 10
RESULT 8
AX592381
LOCUS AX592381 10 bp DNA linear PAT 27-JAN-2003
DEFINITION Sequence 71 from Patent WO02052002.
ACCESSION AX592381
VERSION AX592381.1 GI:27950483
KEYWORDS
SOURCE
ORGANISM
synthetic construct
other sequences; artificial sequences.
1
REFERENCE
AUTHORS Fearon,K.L. and Dina,D.
TITLE Immunomodulatory polynucleotides and methods of using the same
JOURNAL Patent: WO 02052002-A 71 04-JUL-2002;
Dynamax Technologies Corporation (US)
FEATURES
source
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/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="Polynucleotide containing CG"
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Query Match 68.0%; Score 6.8; DB 6; Length 10;
Best Local Similarity 66.7%; Pred. No. 9.7e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
QY 2 DANCCKTCG 10
: |||: |||
Db 2 GACCGTTCG 10
RESULT 9
AX592382
LOCUS AX592382 10 bp DNA linear PAT 27-JAN-2003
DEFINITION Sequence 72 from Patent WO02052002.
ACCESSION AX592382
VERSION AX592382.1 GI:27950484
KEYWORDS
SOURCE
ORGANISM
synthetic construct
other sequences; artificial sequences.
1
REFERENCE
AUTHORS Fearon,K.L. and Dina,D.
TITLE Immunomodulatory polynucleotides and methods of using the same
JOURNAL Patent: WO 02052002-A 72 04-JUL-2002;
Dynamax Technologies Corporation (US)
FEATURES
source
1. .10
/organism="synthetic construct"
/mol_type="unassigned DNA"

REFERENCE
AUTHORS Fearon,K.L. and Dina,D.
TITLE Immunomodulatory polynucleotides and methods of using the same
JOURNAL Patent: WO 02052002-A 70 04-JUL-2002;
Dynamax Technologies Corporation (US)
FEATURES
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/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="Polynucleotide containing CG"
ORIGIN
Query Match 68.0%; Score 6.8; DB 6; Length 10;
Best Local Similarity 66.7%; Pred. No. 9.7e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
QY 2 DANCCKTCG 10
: |||: |||
Db 2 GACCGTTCG 10
RESULT 8
AX592381
LOCUS AX592381 10 bp DNA linear PAT 27-JAN-2003
DEFINITION Sequence 71 from Patent WO02052002.
ACCESSION AX592381
VERSION AX592381.1 GI:27950483
KEYWORDS
SOURCE
ORGANISM
synthetic construct
other sequences; artificial sequences.
1
REFERENCE
AUTHORS Fearon,K.L. and Dina,D.
TITLE Immunomodulatory polynucleotides and methods of using the same
JOURNAL Patent: WO 02052002-A 71 04-JUL-2002;
Dynamax Technologies Corporation (US)
FEATURES
source
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/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="Polynucleotide containing CG"
ORIGIN
Query Match 68.0%; Score 6.8; DB 6; Length 10;
Best Local Similarity 66.7%; Pred. No. 9.7e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
QY 2 DANCCKTCG 10
: |||: |||
Db 2 GACCGTTCG 10
RESULT 9
AX592382
LOCUS AX592382 10 bp DNA linear PAT 27-JAN-2003
DEFINITION Sequence 72 from Patent WO02052002.
ACCESSION AX592382
VERSION AX592382.1 GI:27950484
KEYWORDS
SOURCE
ORGANISM
synthetic construct
other sequences; artificial sequences.
1
REFERENCE
AUTHORS Fearon,K.L. and Dina,D.
TITLE Immunomodulatory polynucleotides and methods of using the same
JOURNAL Patent: WO 02052002-A 72 04-JUL-2002;
Dynamax Technologies Corporation (US)
FEATURES
source
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/organism="synthetic construct"
/mol_type="unassigned DNA"

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ORIGIN
Query Match      68.0%; Score 6.8; DB 6; Length 10;
Best Local Similarity 66.7%; Pred. No. 9.7e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY  2  DANCCKTCG 10
Db   2  TAACGGTCG 10

RESULT 10
AX592383
LOCUS      AX592383      10 bp      DNA      linear      PAT 27-JAN-2003
DEFINITION Sequence 73 from Patent WO02052002.
ACCESSION  AX592383
VERSION     AX592383.1 GI:27950485
KEYWORDS    .
SOURCE      synthetic construct
ORGANISM    other sequences; artificial sequences.
REFERENCE   1
AUTHORS     Fearon,K.L. and Dina,D.
TITLE       Immunomodulatory polynucleotides and methods of using the same
JOURNAL     Patent: WO 02052002-A 73 04-JUL-2002;
            Dynavax Technologies Corporation (US)
FEATURES    Location/Qualifiers
            source
            1..10
            /organism="synthetic construct"
            /mol_type="unassigned DNA"
            /db_xref="taxon:32630"
            /note="Polynucleotide containing CG"

ORIGIN
Query Match      68.0%; Score 6.8; DB 6; Length 10;
Best Local Similarity 66.7%; Pred. No. 9.7e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY  2  DANCCKTCG 10
Db   2  TAACGGTCG 10

RESULT 11
AX592384
LOCUS      AX592384      10 bp      DNA      linear      PAT 27-JAN-2003
DEFINITION Sequence 74 from Patent WO02052002.
ACCESSION  AX592384
VERSION     AX592384.1 GI:27950486
KEYWORDS    .
SOURCE      synthetic construct
ORGANISM    other sequences; artificial sequences.
REFERENCE   1
AUTHORS     Fearon,K.L. and Dina,D.
TITLE       Immunomodulatory polynucleotides and methods of using the same
JOURNAL     Patent: WO 02052002-A 74 04-JUL-2002;
            Dynavax Technologies Corporation (US)
FEATURES    Location/Qualifiers
            source
            1..10
            /organism="synthetic construct"
            /mol_type="unassigned DNA"
            /db_xref="taxon:32630"
            /note="Polynucleotide containing CG"

ORIGIN
Query Match      68.0%; Score 6.8; DB 6; Length 10;
Best Local Similarity 66.7%; Pred. No. 9.7e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY  2  DANCCKTCG 10
Db   2  TAACGGTCG 10

RESULT 12
AX592385
LOCUS      AX592385      10 bp      DNA      linear      PAT 27-JAN-2003
DEFINITION Sequence 75 from Patent WO02052002.
ACCESSION  AX592385
VERSION     AX592385.1 GI:27950487
KEYWORDS    .
SOURCE      synthetic construct
ORGANISM    other sequences; artificial sequences.
REFERENCE   1
AUTHORS     Fearon,K.L. and Dina,D.
TITLE       Immunomodulatory polynucleotides and methods of using the same
JOURNAL     Patent: WO 02052002-A 75 04-JUL-2002;
            Dynavax Technologies Corporation (US)
FEATURES    Location/Qualifiers
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            1..10
            /organism="synthetic construct"
            /mol_type="unassigned DNA"
            /db_xref="taxon:32630"
            /note="Polynucleotide containing CG"

ORIGIN
Query Match      68.0%; Score 6.8; DB 6; Length 10;
Best Local Similarity 66.7%; Pred. No. 9.7e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY  2  DANCCKTCG 10
Db   2  TAACGGTCG 10

RESULT 13
AX592386
LOCUS      AX592386      10 bp      DNA      linear      PAT 27-JAN-2003
DEFINITION Sequence 76 from Patent WO02052002.
ACCESSION  AX592386
VERSION     AX592386.1 GI:27950488
KEYWORDS    .
SOURCE      synthetic construct
ORGANISM    other sequences; artificial sequences.
REFERENCE   1
AUTHORS     Fearon,K.L. and Dina,D.
TITLE       Immunomodulatory polynucleotides and methods of using the same
JOURNAL     Patent: WO 02052002-A 76 04-JUL-2002;
            Dynavax Technologies Corporation (US)
FEATURES    Location/Qualifiers
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            /db_xref="taxon:32630"
            /note="Polynucleotide containing CG"

misc_feature 1
            /note="n = 5-bromocytosine"

ORIGIN
Query Match      68.0%; Score 6.8; DB 6; Length 10;
Best Local Similarity 66.7%; Pred. No. 9.7e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY  2  DANCCKTCG 10
Db   2  TAACGGTCG 10

RESULT 14
AX592387
LOCUS      AX592387      10 bp      DNA      linear      PAT 27-JAN-2003
DEFINITION Sequence 77 from Patent WO02052002.
ACCESSION  AX592387
VERSION     AX592387.1 GI:27950489
KEYWORDS    .
SOURCE      synthetic construct
ORGANISM    other sequences; artificial sequences.
REFERENCE   1
AUTHORS     Fearon,K.L. and Dina,D.
TITLE       Immunomodulatory polynucleotides and methods of using the same
JOURNAL     Patent: WO 02052002-A 77 04-JUL-2002;
            Dynavax Technologies Corporation (US)
FEATURES    Location/Qualifiers
            source
            1..10
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            /mol_type="unassigned DNA"
            /db_xref="taxon:32630"
            /note="Polynucleotide containing CG"

misc_feature 1
            /note="n = 5-bromocytosine"

ORIGIN
Query Match      68.0%; Score 6.8; DB 6; Length 10;
Best Local Similarity 66.7%; Pred. No. 9.7e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY  2  DANCCKTCG 10
Db   2  TAACGGTCG 10

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DEFINITION	Sequence 77 from Patent WO02052002.
ACCESSION	AX592387
VERSION	AX592387.1 GI:27950489
KEYWORDS	synthetic construct other sequences; artificial sequences.
SOURCE	ORGANISM
REFERENCE	1
AUTHORS	Fearon,K.L. and Dina,D.
TITLE	Immunomodulatory polynucleotides and methods of using the same
JOURNAL	Patent: WO 02052002-A 77 04-JUL-2002; Dynavax Technologies Corporation (US)
FEATURES	Location/Qualifiers
source	1..10 /organism="synthetic construct" /mol_type="unassigned DNA" /db_xref="taxon:32630" /note="Polynucleotide containing CG"
ORIGIN	
Query Match	68.0%; Score 6.8; DB 6; Length 10;
Best Local Similarity	66.7%; Pred.No. 9.7e+05;
Matches	6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
Qy	2 DANCGKTCG 10 : :
Db	2 GAACGTTCG 10
RESULT 15	
LOCUS	AX592387/c
DEFINITION	Sequence 77 from Patent WO02052002.
ACCESSION	AX592387
VERSION	AX592387.1 GI:27950489
KEYWORDS	synthetic construct synthetic construct other sequences; artificial sequences.
SOURCE	ORGANISM
REFERENCE	1
AUTHORS	Fearon,K.L. and Dina,D.
TITLE	Immunomodulatory polynucleotides and methods of using the same
JOURNAL	Patent: WO 02052002-A 77 04-JUL-2002; Dynavax Technologies Corporation (US)
FEATURES	Location/Qualifiers
source	1..10 /organism="synthetic construct" /mol_type="unassigned DNA" /db_xref="taxon:32630" /note="Polynucleotide containing CG"
ORIGIN	
Query Match	68.0%; Score 6.8; DB 6; Length 10;
Best Local Similarity	66.7%; Pred.No. 9.7e+05;
Matches	6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
Qy	2 DANCGKTCG 10 : :
Db	2 GAACGTTCG 10
RESULT 16	
LOCUS	AX592388
DEFINITION	Sequence 78 from Patent WO02052002.
ACCESSION	AX592388
VERSION	AX592388.1 GI:27950490
KEYWORDS	synthetic construct synthetic construct other sequences; artificial sequences.
SOURCE	ORGANISM
REFERENCE	1
AUTHORS	Fearon,K.L. and Dina,D.
TITLE	Immunomodulatory polynucleotides and methods of using the same
JOURNAL	Patent: WO 02052002-A 78 04-JUL-2002; Dynavax Technologies Corporation (US)
FEATURES	Location/Qualifiers
source	1..10 /organism="synthetic construct" /mol_type="unassigned DNA" /db_xref="taxon:32630" /note="Polynucleotide containing CG"
ORIGIN	
Query Match	68.0%; Score 6.8; DB 6; Length 10;
Best Local Similarity	66.7%; Pred.No. 9.7e+05;
Matches	6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
Qy	2 DANCGKTCG 10 : :
Db	9 GAACGTTCG 1
RESULT 17	
LOCUS	AX592388/c
DEFINITION	Sequence 78 from Patent WO02052002.
ACCESSION	AX592388
VERSION	AX592388.1 GI:27950490
KEYWORDS	synthetic construct synthetic construct other sequences; artificial sequences.
SOURCE	ORGANISM
REFERENCE	1
AUTHORS	Fearon,K.L. and Dina,D.
TITLE	Immunomodulatory polynucleotides and methods of using the same
JOURNAL	Patent: WO 02052002-A 78 04-JUL-2002; Dynavax Technologies Corporation (US)
FEATURES	Location/Qualifiers
source	1..10 /organism="synthetic construct" /mol_type="unassigned DNA" /db_xref="taxon:32630" /note="Polynucleotide containing CG"
ORIGIN	
Query Match	68.0%; Score 6.8; DB 6; Length 10;
Best Local Similarity	66.7%; Pred.No. 9.7e+05;
Matches	6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
Qy	2 DANCGKTCG 10 : :
Db	2 GAACGTTCG 10
RESULT 18	
LOCUS	AX592389
DEFINITION	Sequence 79 from Patent WO02052002.
ACCESSION	AX592389
VERSION	AX592389.1 GI:27950491
KEYWORDS	synthetic construct synthetic construct other sequences; artificial sequences.
SOURCE	ORGANISM
REFERENCE	1
AUTHORS	Fearon,K.L. and Dina,D.
TITLE	Immunomodulatory polynucleotides and methods of using the same
JOURNAL	Patent: WO 02052002-A 79 04-JUL-2002; Dynavax Technologies Corporation (US)
FEATURES	Location/Qualifiers
source	1..10 /organism="synthetic construct" /mol_type="unassigned DNA" /db_xref="taxon:32630" /note="Polynucleotide containing CG"
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Query Match	68.0%; Score 6.8; DB 6; Length 10;
Best Local Similarity	66.7%; Pred.No. 9.7e+05;
Matches	6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
Qy	2 DANCGKTCG 10 : :
Db	9 GAACGTTCG 1
RESULT 19	
LOCUS	AX592389
DEFINITION	Sequence 79 from Patent WO02052002.
ACCESSION	AX592389
VERSION	AX592389.1 GI:27950491
KEYWORDS	synthetic construct synthetic construct other sequences; artificial sequences.
SOURCE	ORGANISM
REFERENCE	1
AUTHORS	Fearon,K.L. and Dina,D.
TITLE	Immunomodulatory polynucleotides and methods of using the same
JOURNAL	Patent: WO 02052002-A 79 04-JUL-2002; Dynavax Technologies Corporation (US)
FEATURES	Location/Qualifiers
source	1..10 /organism="synthetic construct" /mol_type="unassigned DNA" /db_xref="taxon:32630" /note="Polynucleotide containing CG"
ORIGIN	
Query Match	68.0%; Score 6.8; DB 6; Length 10;
Best Local Similarity	66.7%; Pred.No. 9.7e+05;
Matches	6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
Qy	2 DANCGKTCG 10 : :
Db	9 GAACGTTCG 1
RESULT 20	
LOCUS	AX592388
DEFINITION	Sequence 78 from Patent WO02052002.
ACCESSION	AX592388
VERSION	AX592388.1 GI:27950490
KEYWORDS	synthetic construct synthetic construct other sequences; artificial sequences.
SOURCE	ORGANISM
REFERENCE	1
AUTHORS	Fearon,K.L. and Dina,D.
TITLE	Immunomodulatory polynucleotides and methods of using the same
JOURNAL	Patent: WO 02052002-A 78 04-JUL-2002; Dynavax Technologies Corporation (US)
FEATURES	Location/Qualifiers
source	1..10 /organism="synthetic construct" /mol_type="unassigned DNA" /db_xref="taxon:32630" /note="Polynucleotide containing CG"
ORIGIN	
Query Match	68.0%; Score 6.8; DB 6; Length 10;
Best Local Similarity	66.7%; Pred.No. 9.7e+05;
Matches	6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
Qy	2 DANCGKTCG 10 : :
Db	9 GAACGTTCG 1
RESULT 21	
LOCUS	AX592388
DEFINITION	Sequence 78 from Patent WO02052002.
ACCESSION	AX592388
VERSION	AX592388.1 GI:27950490
KEYWORDS	synthetic construct synthetic construct other sequences; artificial sequences.
SOURCE	ORGANISM
REFERENCE	1
AUTHORS	

[illegible]

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misc_feature 1
/note="n = 5-bromocytosine"

ORIGIN
Query Match      68.0%; Score 6.8; DB 6; Length 10;
Best Local Similarity 66.7%; Pred. No. 9.7e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
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Db 2 GAACGTCG 10

RESULT 19
AX592390
LOCUS AX592390 10 bp DNA linear PAT 27-JAN-2003
DEFINITION Sequence 80 from Patent WO02052002.
ACCESSION AX592390
VERSION AX592390.1 GI:27950492
KEYWORDS
SOURCE synthetic construct
ORGANISM other sequences; artificial sequences.
REFERENCE
1 Fearon,K.L. and Dina,D.
AUTHORS Immunomodulatory polynucleotides and methods of using the same
TITLE Patent: WO 02052002-A 80 04-JUL-2002;
JOURNAL Dynavax Technologies Corporation (US)
FEATURES
source
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/note="Polynucleotide containing CG"

ORIGIN
Query Match      68.0%; Score 6.8; DB 6; Length 10;
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Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
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Db 2 TAACGTCG 10

RESULT 20
AX592391
LOCUS AX592391 10 bp DNA linear PAT 27-JAN-2003
DEFINITION Sequence 81 from Patent WO02052002.
ACCESSION AX592391
VERSION AX592391.1 GI:27950493
KEYWORDS
SOURCE synthetic construct
ORGANISM other sequences; artificial sequences.
REFERENCE
1 Fearon,K.L. and Dina,D.
AUTHORS Immunomodulatory polynucleotides and methods of using the same
TITLE Patent: WO 02052002-A 81 04-JUL-2002;
JOURNAL Dynavax Technologies Corporation (US)
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/db_xref="taxon:32630"
/note="Polynucleotide containing CG"

ORIGIN
Query Match      68.0%; Score 6.8; DB 6; Length 10;
Best Local Similarity 66.7%; Pred. No. 9.7e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
   :|||:||||
Db 2 TAACGTCG 10

RESULT 21
AX592392
LOCUS AX592392 10 bp DNA linear PAT 27-JAN-2003
DEFINITION Sequence 82 from Patent WO02052002.
ACCESSION AX592392
VERSION AX592392.1 GI:27950494
KEYWORDS
SOURCE synthetic construct
ORGANISM other sequences; artificial sequences.
REFERENCE
1 Fearon,K.L. and Dina,D.
AUTHORS Immunomodulatory polynucleotides and methods of using the same
TITLE Patent: WO 02052002-A 82 04-JUL-2002;
JOURNAL Dynavax Technologies Corporation (US)
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Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
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Db 2 TAACGTCG 10

RESULT 22
AX592443
LOCUS AX592443 10 bp DNA linear PAT 27-JAN-2003
DEFINITION Sequence 133 from Patent WO02052002.
ACCESSION AX592443
VERSION AX592443.1 GI:27950545
KEYWORDS
SOURCE synthetic construct
ORGANISM other sequences; artificial sequences.
REFERENCE
1 Fearon,K.L. and Dina,D.
AUTHORS Immunomodulatory polynucleotides and methods of using the same
TITLE Patent: WO 02052002-A 133 04-JUL-2002;
JOURNAL Dynavax Technologies Corporation (US)
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QY 2 DANCCKTCG 10
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Db 2 DANCCKTCG 10

RESULT 23
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AX592412
LOCUS AX592412 11 bp DNA linear PAT 27-JAN-2003
DEFINITION Sequence 102 from Patent WO02052002.
ACCESSION AX592412
VERSION AX592412.1 GI:27950514
KEYWORDS
SOURCE synthetic construct
ORGANISM synthetic construct
other sequences; artificial sequences.
REFERENCE 1
AUTHORS Fearon,K.L. and Dina,D.
TITLE Immunomodulatory polynucleotides and methods of using the same
JOURNAL Patent: WO 02052002-A 102 04-JUL-2002;
DynaVax Technologies Corporation (US)
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Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
QY 2 DANCCKTCG 10
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Db 3 GAACGTCG 11
RESULT 24
AX592412/c
LOCUS AX592412 11 bp DNA linear PAT 27-JAN-2003
DEFINITION Sequence 102 from Patent WO02052002.
ACCESSION AX592412
VERSION AX592412.1 GI:27950514
KEYWORDS
SOURCE synthetic construct
ORGANISM synthetic construct
other sequences; artificial sequences.
REFERENCE 1
AUTHORS Fearon,K.L. and Dina,D.
TITLE Immunomodulatory polynucleotides and methods of using the same
JOURNAL Patent: WO 02052002-A 102 04-JUL-2002;
DynaVax Technologies Corporation (US)
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Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
QY 2 DANCCKTCG 10
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Db 3 GAACGTCG 11
RESULT 25
AX592420
LOCUS AX592420 11 bp DNA linear PAT 28-JAN-2003
DEFINITION Sequence 110 from Patent WO02052002.
ACCESSION AX592420
VERSION AX592420.1 GI:27950522
KEYWORDS
SOURCE synthetic construct
ORGANISM synthetic construct
other sequences; artificial sequences.
REFERENCE 1
AUTHORS Fearon,K.L. and Dina,D.
TITLE Immunomodulatory polynucleotides and methods of using the same
JOURNAL Patent: WO 02052002-A 116 04-JUL-2002;
DynaVax Technologies Corporation (US)
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/note="Polynucleotide containing CG"

REFERENCE 1
AUTHORS Fearon,K.L. and Dina,D.
TITLE Immunomodulatory polynucleotides and methods of using the same
JOURNAL Patent: WO 02052002-A 110 04-JUL-2002;
DynaVax Technologies Corporation (US)
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/db_xref="taxon:32630"
/note="Polynucleotide containing CG"
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Best Local Similarity 66.7%; Pred. No. 9.7e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
QY 2 DANCCKTCG 10
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Db 3 GAACGTCG 11
RESULT 26
AX592420/c
LOCUS AX592420 11 bp DNA linear PAT 28-JAN-2003
DEFINITION Sequence 110 from Patent WO02052002.
ACCESSION AX592420
VERSION AX592420.1 GI:27950522
KEYWORDS
SOURCE synthetic construct
ORGANISM synthetic construct
other sequences; artificial sequences.
REFERENCE 1
AUTHORS Fearon,K.L. and Dina,D.
TITLE Immunomodulatory polynucleotides and methods of using the same
JOURNAL Patent: WO 02052002-A 110 04-JUL-2002;
DynaVax Technologies Corporation (US)
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Query Match 68.0%; Score 6.8; DB 6; Length 11;
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Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
QY 2 DANCCKTCG 10
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Db 10 GAACGTCG 2
RESULT 27
AX592426
LOCUS AX592426 11 bp DNA linear PAT 27-JAN-2003
DEFINITION Sequence 116 from Patent WO02052002.
ACCESSION AX592426
VERSION AX592426.1 GI:27950528
KEYWORDS
SOURCE synthetic construct
ORGANISM synthetic construct
other sequences; artificial sequences.
REFERENCE 1
AUTHORS Fearon,K.L. and Dina,D.
TITLE Immunomodulatory polynucleotides and methods of using the same
JOURNAL Patent: WO 02052002-A 116 04-JUL-2002;
DynaVax Technologies Corporation (US)
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/mol_type="unassigned DNA"

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Query Match      68.0%; Score 6.8; DB 6; Length 11;
Best Local Similarity 66.7%; Pred. No. 9.7e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGKTCG 10
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Db 3 GACCGTTCG 11

RESULT 28
LOCUS AR176675 12 bp DNA linear PAT 17-DEC-2001
DEFINITION Sequence 6 from patent US 6312894.
ACCESSION AR176675
VERSION AR176675.1 GI:17919030
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 12)
AUTHORS Hedgpeth,J., Afonina,I.A., Kutyavin,I.V., Lukhtanov,E.A.,
          Belousov,E.S. and Meyer,R.B. Jr.
TITLE Hybridization and mismatch discrimination using oligonucleotides
        conjugated to minor groove binders
JOURNAL Patent: US 6312894-A 6 06-NOV-2001;
FEATURES             Location/Qualifiers
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Query Match      68.0%; Score 6.8; DB 6; Length 12;
Best Local Similarity 66.7%; Pred. No. 9.7e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGKTCG 10
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Db 4 TAACGTTCG 12

RESULT 29
LOCUS BD192579 12 bp DNA linear PAT 17-JUL-2003
DEFINITION Novel plasmids for plant transformation and method for using same.
ACCESSION BD192579
VERSION BD192579.1 GI:33002318
KEYWORDS JP 2002514927-A/11.
SOURCE synthetic construct
ORGANISM other sequences: artificial sequences.
REFERENCE 1 (bases 1 to 12)
AUTHORS Stuijver,M.H., Ponstein,A.S., Ohl,S.A., Goddijn,O.J.M., Simons,L.H.,
          Dekker,B.M.M., Hoekstra,S., Tigelaar,H. and Elzinga,N.
TITLE Novel plasmids for plant transformation and method for using same
JOURNAL Patent: JP 2002514927-A 11 21-MAY-2002;
          MOGEN INTERNATIONAL NV
COMMENT PN JP 2002514927-A/11
        PD 21-MAY-2002
        PF 29-JUN-1998 JP 1999508121
        PR 30-JUN-1997 EP 97201990.5
        PI MAARTEN HENDRIK STUIJVER,ANNE SILENE PONSTEIN,STEPHAN ANDREAS
          PI OHL,
          PI OSCAR JOHANNA MARIA GODDIJN,LAMBERTUS HENRICUS SIMONS, PI
          BERNARDUS MARTINUS MARIA DEKKER,SIETSKES HOEKSTRA,HENDRIK PI
          TIGELAAR,
          PI NICOLAS ELZINGA
          PC C12N15/82,C12N15/63,A01H5/00

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Best Local Similarity 66.7%; Pred. No. 9.7e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGKTCG 10
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Db 1 GATCGGTCG 9

RESULT 30
LOCUS BD260026 12 bp DNA linear PAT 17-JUL-2003
DEFINITION Hybridization and mismatch discrimination using oligonucleotides
        conjugated to minor groove binders.
ACCESSION BD260026
VERSION BD260026.1 GI:33069796
KEYWORDS JP 2002527040-A/6.
SOURCE Escherichia coli
ORGANISM Escherichia coli
REFERENCE 1 (bases 1 to 12)
AUTHORS Hedgpeth,J., Afonina,I.A., Kutyavin,I.V., Lukhtanov,E.A.,
          Belousov,E.S. and Jr.R.B.M.
TITLE Hybridization and mismatch discrimination using oligonucleotides
        conjugated to minor groove binders
JOURNAL Patent: JP 2002527040-A 6 27-AUG-2002;
          EPOCH BIOSCIENCES INC
COMMENT OS Escherichia coli
        PN JP 2002527040-A/6
        PD 27-AUG-2002
        PF 05-APR-1999 JP 2000542342
        PR 03-APR-1998 US 09/054832
        PI JOEL HEDGPETH,IRINA A AFONINA,IGOR V KUTYAVIN,EUGENY A PI
          LUKHTANOV,
          PI EVGENIY S BELOUSOV,RICH B MEYER JR
          PC C12N15/09,C12N15/09,C07H21/02,C07H21/04,C12Q1/68,G01N21/78, PC
          G01N33/483,
          PC G01N33/53,G01N33/566,C12N15/00,C12N15/00
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Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGKTCG 10
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Db 4 TAACGTTCG 12

RESULT 31
AR437498/c

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LOCUS AR437498 12 bp DNA linear PAT 18-DEC-2003
DEFINITION Sequence 42 from patent US 6660475.
ACCESSION AR437498
VERSION AR437498.1 GI:40202572
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 12)
AUTHORS Jack,W.E., Schildkraut,I. and Menin,J.F.
TITLE Use of site-specific nicking endonucleases to create single-stranded regions and applications thereof
JOURNAL Patent: US 6660475-A 42 09-DEC-2003;
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Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
QY 2 DANCCKTCG 10
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Db 12 GAACGTCG 4
RESULT 32
AX001132
LOCUS AX001132 12 bp DNA linear PAT 10-MAR-2000
DEFINITION Sequence 11 from Patent WO9901563.
ACCESSION AX001132
VERSION AX001132.1 GI:7241331
KEYWORDS
SOURCE unidentified
ORGANISM unidentified
REFERENCE 1 (bases 1 to 12)
AUTHORS Goddijn,O.J. and Ohl,S.A.
TITLE PLASMIDS FOR PLANT TRANSFORMATION AND METHOD FOR USING THE SAME
JOURNAL Patent: WO 9901563-A 11 14-JAN-1999;
GODDIJN OSCAR JOHANNA MARIA (NL); OHL STEPHAN ANDREAS (NL)
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Best Local Similarity 66.7%; Pred. No. 9.7e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
QY 2 DANCCKTCG 10
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Db 1 GATCGGTCG 9
RESULT 33
AX592417
LOCUS AX592417 12 bp DNA linear PAT 27-JAN-2003
DEFINITION Sequence 107 from Patent WO2052002.
ACCESSION AX592417
VERSION AX592417.1 GI:27950519
KEYWORDS
SOURCE synthetic construct
ORGANISM other sequences; artificial sequences.
REFERENCE 1
AUTHORS Fearon,K.L. and Dina,D.
TITLE Immunomodulatory polynucleotides and methods of using the same
JOURNAL Patent: WO 02052002-A 107 04-JUL-2002;

Dynavax Technologies Corporation (US)
Location/Qualifiers
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QY 2 DANCCKTCG 10
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Db 4 GAACGTCG 12
RESULT 34
AX592419
LOCUS AX592419 12 bp DNA linear PAT 27-JAN-2003
DEFINITION Sequence 109 from Patent WO2052002.
ACCESSION AX592419
VERSION AX592419.1 GI:27950521
KEYWORDS
SOURCE synthetic construct
ORGANISM other sequences; artificial sequences.
REFERENCE 1
AUTHORS Fearon,K.L. and Dina,D.
TITLE Immunomodulatory polynucleotides and methods of using the same
JOURNAL Patent: WO 02052002-A 109 04-JUL-2002;
Dynavax Technologies Corporation (US)
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Best Local Similarity 66.7%; Pred. No. 9.7e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
QY 2 DANCCKTCG 10
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Db 4 TAACGTCG 12
RESULT 35
BD064849/c
LOCUS BD064849/c 12 bp DNA linear PAT 27-AUG-2002
DEFINITION Method for detecting the extent of binding of transcriptional regulatory protein to oligoDNA.
ACCESSION BD064849
VERSION BD064849.1 GI:22610452
KEYWORDS JP 2001275678-A/61.
SOURCE synthetic construct
ORGANISM other sequences; artificial sequences.
REFERENCE 1 (bases 1 to 12)
AUTHORS Kishimoto,T., Niwa,S., Mori,Y., Sachiyo, Mimaki, Fukushima,R. and Nishikawa,K.
TITLE Method for detecting the extent of binding of transcriptional regulatory protein to oligoDNA
JOURNAL Patent: JP 2001275678-A 61 09-OCT-2001;
SUMITOMO ELECTRIC INDUSTRIES LTD
COMMENT OS Artificial Sequence
PN JP 2001275678-A/61
FD 09-OCT-2001
PF 31-MAR-2000 JP 2000096306
PI TOSHIIHIKO KISHIMOTO,SHINICHIRO NIWA,YUKO MORI,SACHIYO PI

MIMAKI, REI FUKUSHIMA,
PI KAZUKO NISHIKAWA
PC C12N15/09, C12N5/10, C12Q1/00, C12Q1/68, C12N15/00, C12N5/00 CC
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FEATURES
source

ORIGIN

Query Match 68.0%; Score 6.8; DB 6; Length 12;
Best Local Similarity 66.7%; Pred. No. 9.7e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
QY 2 DANCCKTTCG 10
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Db 12 AACCGTTCG 4

RESULT 36
AX592407
LOCUS AX592407 13 bp DNA linear PAT 27-JAN-2003
DEFINITION Sequence 97 from Patent WO02052002.
ACCESSION AX592407
VERSION AX592407.1 GI:27950509
KEYWORDS synthetic construct
SOURCE synthetic construct
ORGANISM other sequences; artificial sequences.
REFERENCE 1
AUTHORS Fearon, K.L. and Dina, D.
TITLE Immunomodulatory polynucleotides and methods of using the same
JOURNAL Patent: WO 02052002-A 97 04-JUL-2002;
DynaVax Technologies Corporation (US)
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Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
QY 2 DANCCKTTCG 10
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Db 5 GAACGTTCG 13

RESULT 37
AX592407/c
LOCUS AX592407/c 13 bp DNA linear PAT 27-JAN-2003
DEFINITION Sequence 97 from Patent WO02052002.
ACCESSION AX592407
VERSION AX592407.1 GI:27950509
KEYWORDS synthetic construct
SOURCE synthetic construct
ORGANISM other sequences; artificial sequences.
REFERENCE 1
AUTHORS Fearon, K.L. and Dina, D.
TITLE Immunomodulatory polynucleotides and methods of using the same
JOURNAL Patent: WO 02052002-A 97 04-JUL-2002;
DynaVax Technologies Corporation (US)
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Db 12 GAACGTTCG 4

RESULT 38
AX592409
LOCUS AX592409 13 bp DNA linear PAT 27-JAN-2003
DEFINITION Sequence 99 from Patent WO02052002.
ACCESSION AX592409
VERSION AX592409.1 GI:27950511
KEYWORDS synthetic construct
SOURCE synthetic construct
ORGANISM other sequences; artificial sequences.
REFERENCE 1
AUTHORS Fearon, K.L. and Dina, D.
TITLE Immunomodulatory polynucleotides and methods of using the same
JOURNAL Patent: WO 02052002-A 99 04-JUL-2002;
DynaVax Technologies Corporation (US)
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/note='Polynucleotide containing CG'
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/note='n = 5-bromocytosine'

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Query Match 68.0%; Score 6.8; DB 6; Length 13;
Best Local Similarity 66.7%; Pred. No. 9.6e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
QY 2 DANCCKTTCG 10
: |||||
Db 5 GAACGTTCG 13

RESULT 39
AX592409/c
LOCUS AX592409/c 13 bp DNA linear PAT 27-JAN-2003
DEFINITION Sequence 99 from Patent WO02052002.
ACCESSION AX592409
VERSION AX592409.1 GI:27950511
KEYWORDS synthetic construct
SOURCE synthetic construct
ORGANISM other sequences; artificial sequences.
REFERENCE 1
AUTHORS Fearon, K.L. and Dina, D.
TITLE Immunomodulatory polynucleotides and methods of using the same
JOURNAL Patent: WO 02052002-A 99 04-JUL-2002;
DynaVax Technologies Corporation (US)
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misc_feature 2
/note='n = 5-bromocytosine'

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Query Match 68.0%; Score 6.8; DB 6; Length 13;
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RESULT 40
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 LOCUS 13 bp DNA linear PAT 27-JAN-2003
 DEFINITION Sequence 101 from Patent WO02052002.
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 KEYWORDS
 SOURCE synthetic construct
 ORGANISM other sequences; artificial sequences.

REFERENCE 1
 AUTHORS Fearon, K.L. and Dina, D.
 TITLE Immunomodulatory polynucleotides and methods of using the same
 JOURNAL Patent: WO 02052002-A 101 04-JUL-2002;
 DYNAX Technologies Corporation (US)
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ORIGIN

Query Match 68.0%; Score 6.8; DB 6; Length 13;
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 Db 5 TAACGTCG 13

RESULT 41
 AX592413
 LOCUS 13 bp DNA linear PAT 27-JAN-2003
 DEFINITION Sequence 103 from Patent WO02052002.
 ACCESSION AX592413
 VERSION AX592413.1 GI:27950515
 KEYWORDS
 SOURCE synthetic construct
 ORGANISM other sequences; artificial sequences.

REFERENCE 1
 AUTHORS Fearon, K.L. and Dina, D.
 TITLE Immunomodulatory polynucleotides and methods of using the same
 JOURNAL Patent: WO 02052002-A 103 04-JUL-2002;
 DYNAX Technologies Corporation (US)
 FEATURES Location/Qualifiers
 source
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 /organism="synthetic construct"
 /mol_type="unassigned DNA"
 /db_xref="taxon:32630"
 /note="Polynucleotide containing CG"

ORIGIN

Query Match 68.0%; Score 6.8; DB 6; Length 13;
 Best Local Similarity 66.7%; Pred. No. 9.6e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
 :|||:||||
 Db 5 GAACGTCG 13

RESULT 42
 AX592414
 LOCUS 13 bp DNA linear PAT 27-JAN-2003
 DEFINITION Sequence 104 from Patent WO02052002.
 ACCESSION AX592414
 VERSION AX592414.1 GI:27950516
 KEYWORDS
 SOURCE synthetic construct
 ORGANISM other sequences; artificial sequences.

REFERENCE 1
 AUTHORS Fearon, K.L. and Dina, D.
 TITLE Immunomodulatory polynucleotides and methods of using the same
 JOURNAL Patent: WO 02052002-A 104 04-JUL-2002;
 DYNAX Technologies Corporation (US)
 FEATURES Location/Qualifiers
 source
 1..13
 /organism="synthetic construct"
 /mol_type="unassigned DNA"
 /db_xref="taxon:32630"
 /note="Polynucleotide containing CG"

ORIGIN
 Query Match 68.0%; Score 6.8; DB 6; Length 13;
 Best Local Similarity 66.7%; Pred. No. 9.6e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
 :|||:||||
 Db 5 TATCGTCG 13

RESULT 43
 AX592415
 LOCUS 13 bp DNA linear PAT 27-JAN-2003
 DEFINITION Sequence 105 from Patent WO02052002.
 ACCESSION AX592415
 VERSION AX592415.1 GI:27950517
 KEYWORDS
 SOURCE synthetic construct
 ORGANISM other sequences; artificial sequences.

REFERENCE 1
 AUTHORS Fearon, K.L. and Dina, D.
 TITLE Immunomodulatory polynucleotides and methods of using the same
 JOURNAL Patent: WO 02052002-A 105 04-JUL-2002;
 DYNAX Technologies Corporation (US)
 FEATURES Location/Qualifiers
 source
 1..13
 /organism="synthetic construct"
 /mol_type="unassigned DNA"
 /db_xref="taxon:32630"
 /note="Polynucleotide containing CG"

ORIGIN
 Query Match 68.0%; Score 6.8; DB 6; Length 13;
 Best Local Similarity 66.7%; Pred. No. 9.6e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
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 Db 5 TACCGTCG 13

RESULT 44
 AX592416
 LOCUS 13 bp DNA linear PAT 27-JAN-2003
 DEFINITION Sequence 106 from Patent WO02052002.
 ACCESSION AX592416
 VERSION AX592416.1 GI:27950518
 KEYWORDS
 SOURCE synthetic construct
 ORGANISM other sequences; artificial sequences.

BD192321	LOCUS	BD192321	14 bp	DNA	linear	PAT 17-JUL-2003
	DEFINITION	Hammerhead ribozymes with extended cleavage rule.				
	ACCESSION	BD192321				
	VERSION	BD192321.1				
	KEYWORDS	JP 2002510207-A/4.				
	SOURCE	unidentified				
	ORGANISM	unidentified				

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unclassified.
1 (bases 1 to 14)
REFERENCE
AUTHORS Ludvig, J. and Sproat, B.S.
TITLE Hammerhead ribozymes with extended cleavage rule
JOURNAL Patent: JP 2002510207-A 4 02-APR-2002;
COMMENT INNOVIR LABORATORIES INC
PN JP 2002510207-A/4
PD 02-APR-2002
PF 17-JUN-1998 JP 1999504776
PR 19-JUN-1997 US 878640
PI JANOS LUDWIG, BRIAN S SPROAT
PC C12N15/11, C12N9/00, C07H21/00, A61K31/70//C12Q1/68 CC
Strandedness: Single;
CC Topology: Linear;
FH Key Location/Qualifiers.
FEATURES
source
1. .14
/organism="unidentified"
/mol_type="genomic DNA"
/db_xref="taxon:32644"
ORIGIN
Query Match 68.0%; Score 6.8; DB 6; Length 14;
Best Local Similarity 66.7%; Pred. No. 9.6e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
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Db 4 TACCGGTCG 12

RESULT 49
BD209265
LOCUS
DEFINITION Enzymatic nucleic acid treatment of diseases or conditions related
to hepatitis C virus infection.
14 bp RNA linear PAT 17-JUL-2003
ACCESSION BD209265
VERSION BD209265.1 GI:33019035
KEYWORDS JP 2002512791-A/2855.
SOURCE unidentified
ORGANISM unclassified.
REFERENCE
1 (bases 1 to 14)
AUTHORS Blatt, L., McSwiggen, J.A., Roberts, E., Pavco, P.A. and Macejak, D.
TITLE Enzymatic nucleic acid treatment of diseases or conditions related
to hepatitis C virus infection
JOURNAL Patent: JP 2002512791-A 2855 08-MAY-2002;
COMMENT RIBOZYME PHARMACEUTICALS INC
PN JP 2002512791-A/2855
PD 08-MAY-2002
PF 26-APR-1999 JP 2000545991
PR 27-APR-1998 US 60/083217, 18-SEP-1998 US 60/100842 PR
25-FEB-1999 US 09/257608, 23-MAR-1999 US 09/274553 PI
LAWRENCE BLATT, JAMES A MCSWIGGEN, ELISABETH ROBERTS, PAMELA A PI
PAVCO,
PI DENNIS MACEJAK
PC C12N9/00, A61K31/7105, A61K38/21, A61K48/00, A61P31/12, C12N15/09,
PC A61K37/66,
PC C12N15/00
CC Enzymatic nucleic acid treatment of diseases or conditions CC
related to
CC hepatitis C virus infection.
FH Key Location/Qualifiers
FT source 1. .14
/organism="unidentified"
/mol_type="genomic RNA"
/db_xref="taxon:32644"
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1. .14
/organism="unidentified"
/mol_type="genomic RNA"
/db_xref="taxon:32644"
ORIGIN
Query Match 68.0%; Score 6.8; DB 6; Length 14;
Best Local Similarity 66.7%; Pred. No. 9.6e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: |||||
Db 9 GATCGGTCG 1

RESULT 51
AR234359
LOCUS
DEFINITION Sequence 13 from patent US 6458567.
14 bp DNA linear PAT 20-DEC-2002
ACCESSION AR234359
VERSION AR234359.1 GI:27277047
KEYWORDS Unknown.
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 14)

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Query Match 68.0%; Score 6.8; DB 6; Length 14;
Best Local Similarity 66.7%; Pred. No. 9.6e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: |||||
Db 1 GAACGGTCG 9

RESULT 50
BD209302/c
LOCUS
DEFINITION Enzymatic nucleic acid treatment of diseases or conditions related
to hepatitis C virus infection.
14 bp RNA linear PAT 17-JUL-2003
ACCESSION BD209302
VERSION BD209302.1 GI:33019072
KEYWORDS JP 2002512791-A/2892.
SOURCE unidentified
ORGANISM unclassified.
REFERENCE
1 (bases 1 to 14)
AUTHORS Blatt, L., McSwiggen, J.A., Roberts, E., Pavco, P.A. and Macejak, D.
TITLE Enzymatic nucleic acid treatment of diseases or conditions related
to hepatitis C virus infection
JOURNAL Patent: JP 2002512791-A 2892 08-MAY-2002;
COMMENT RIBOZYME PHARMACEUTICALS INC
PN JP 2002512791-A/2892
PD 08-MAY-2002
PF 26-APR-1999 JP 2000545991
PR 27-APR-1998 US 60/083217, 18-SEP-1998 US 60/100842 PR
25-FEB-1999 US 09/257608, 23-MAR-1999 US 09/274553 PI
LAWRENCE BLATT, JAMES A MCSWIGGEN, ELISABETH ROBERTS, PAMELA A PI
PAVCO,
PI DENNIS MACEJAK
PC C12N9/00, A61K31/7105, A61K38/21, A61K48/00, A61P31/12, C12N15/09,
PC A61K37/66,
PC C12N15/00
CC Enzymatic nucleic acid treatment of diseases or conditions CC
related to
CC hepatitis C virus infection.
FH Key Location/Qualifiers
FT source 1. .14
/organism="unidentified"
/mol_type="genomic RNA"
/db_xref="taxon:32644"
FEATURES
source
1. .14
/organism="unidentified"
/mol_type="genomic RNA"
/db_xref="taxon:32644"
ORIGIN
Query Match 68.0%; Score 6.8; DB 6; Length 14;
Best Local Similarity 66.7%; Pred. No. 9.6e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: |||||
Db 9 GATCGGTCG 1

RESULT 51
AR234359
LOCUS
DEFINITION Sequence 13 from patent US 6458567.
14 bp DNA linear PAT 20-DEC-2002
ACCESSION AR234359
VERSION AR234359.1 GI:27277047
KEYWORDS Unknown.
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 14)

```

AUTHORS Barber,J.R., Welch,P.J., Tritz,R., Yei,S. and Yu,M.
TITLE Hepatitis C Virus ribozymes
JOURNAL Patent: US 6458567-A 13 01-OCT-2002;
FEATURES Location/Qualifiers
source
1. .14
/organism="unknown"
/mol_type="genomic DNA"

ORIGIN

Query Match 68.0%; Score 6.8; DB 6; Length 14;
Best Local Similarity 66.7%; Pred. No. 9.6e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGKTCG 10
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Db 1 GACCGGTCG 9

RESULT 52

LOCUS AR370464 14 bp RNA linear PAT 12-SEP-2003
DEFINITION Sequence 4 from patent US 6300483.
ACCESSION AR370464
VERSION AR370464.1 GI:34607163
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.

REFERENCE

1 (bases 1 to 14)
AUTHORS Ludwig,J. and Sproat,B.S.
TITLE Compositions inducing cleavage of RNA motifs
JOURNAL Patent: US 6300483-A 4 09-OCT-2001;
FEATURES Location/Qualifiers
source
1. .14
/organism="unknown"
/mol_type="unassigned RNA"

ORIGIN

Query Match 68.0%; Score 6.8; DB 6; Length 14;
Best Local Similarity 66.7%; Pred. No. 9.6e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGKTCG 10
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Db 4 TACCGGTCG 12

RESULT 53

LOCUS AX592408 14 bp DNA linear PAT 27-JAN-2003
DEFINITION Sequence 98 from Patent WO02052002.
ACCESSION AX592408
VERSION AX592408.1 GI:27950510
KEYWORDS
SOURCE synthetic construct
ORGANISM other sequences; artificial sequences.

REFERENCE

1
AUTHORS Fearon,K.L. and Dina,D.
TITLE Immunomodulatory polynucleotides and methods of using the same
JOURNAL Patent: WO 02052002-A 98 04-JUL-2002;
Dynamax Technologies Corporation (US)
FEATURES Location/Qualifiers
source
1. .14
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="Polynucleotide containing CG"

ORIGIN

Query Match 68.0%; Score 6.8; DB 6; Length 14;
Best Local Similarity 66.7%; Pred. No. 9.6e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGKTCG 10
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Db 6 GAACGTTTCG 14

RESULT 54

LOCUS AX592408/c 14 bp DNA linear PAT 27-JAN-2003
DEFINITION Sequence 98 from Patent WO02052002.
ACCESSION AX592408
VERSION AX592408.1 GI:27950510
KEYWORDS
SOURCE synthetic construct
ORGANISM other sequences; artificial sequences.

REFERENCE

1
AUTHORS Fearon,K.L. and Dina,D.
TITLE Immunomodulatory polynucleotides and methods of using the same
JOURNAL Patent: WO 02052002-A 98 04-JUL-2002;
Dynamax Technologies Corporation (US)
FEATURES Location/Qualifiers
source
1. .14
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="Polynucleotide containing CG"

ORIGIN

Query Match 68.0%; Score 6.8; DB 6; Length 14;
Best Local Similarity 66.7%; Pred. No. 9.6e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGKTCG 10
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Db 13 GAACGTTTCG 5

RESULT 55

LOCUS AX592410 14 bp DNA linear PAT 27-JAN-2003
DEFINITION Sequence 100 from Patent WO02052002.
ACCESSION AX592410
VERSION AX592410.1 GI:27950512
KEYWORDS
SOURCE synthetic construct
ORGANISM other sequences; artificial sequences.

REFERENCE

1
AUTHORS Fearon,K.L. and Dina,D.
TITLE Immunomodulatory polynucleotides and methods of using the same
JOURNAL Patent: WO 02052002-A 100 04-JUL-2002;
Dynamax Technologies Corporation (US)
FEATURES Location/Qualifiers
source
1. .14
/organism="synthetic construct"
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/db_xref="taxon:32630"
/note="Polynucleotide containing CG"

misc_feature

2
/note="n = 5-bromocytosine"

misc_feature

5
/note="n = 5-bromocytosine"

ORIGIN

Query Match 68.0%; Score 6.8; DB 6; Length 14;
Best Local Similarity 66.7%; Pred. No. 9.6e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGKTCG 10
: |||||
Db 6 GAACGTTTCG 14

RESULT 56
AX592421
LOCUS AX592421 14 bp DNA linear PAT 27-JAN-2003
DEFINITION Sequence 111 from Patent WO02052002.
ACCESSION AX592421
VERSION AX592421.1 GI:27950523
KEYWORDS
SOURCE synthetic construct
ORGANISM synthetic construct
other sequences; artificial sequences.
REFERENCE 1
AUTHORS Fearon,K.L. and Dina,D.
TITLE Immunomodulatory polynucleotides and methods of using the same
JOURNAL Patent: WO 02052002-A 111 04-JUL-2002;
Dynavax Technologies Corporation (US)
FEATURES
source 1..14
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="Polynucleotide containing CG"
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Query Match 68.0%; Score 6.8; DB 6; Length 14;
Best Local Similarity 66.7%; Pred. No. 9.6e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
QY 2 DANCCKTCG 10
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Db 6 GACCGTTCG 14
RESULT 57
AX592421/C
LOCUS AX592421 14 bp DNA linear PAT 27-JAN-2003
DEFINITION Sequence 111 from Patent WO02052002.
ACCESSION AX592421
VERSION AX592421.1 GI:27950523
KEYWORDS
SOURCE synthetic construct
ORGANISM synthetic construct
other sequences; artificial sequences.
REFERENCE 1
AUTHORS Fearon,K.L. and Dina,D.
TITLE Immunomodulatory polynucleotides and methods of using the same
JOURNAL Patent: WO 02052002-A 111 04-JUL-2002;
Dynavax Technologies Corporation (US)
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/note="Polynucleotide containing CG"
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Query Match 68.0%; Score 6.8; DB 6; Length 14;
Best Local Similarity 66.7%; Pred. No. 9.6e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
QY 2 DANCCKTCG 10
: || ||: ||
Db 6 GACCGTTCG 14
RESULT 58
AX592428
LOCUS AX592428 14 bp DNA linear PAT 27-JAN-2003
DEFINITION Sequence 118 from Patent WO02052002.
ACCESSION AX592428
VERSION AX592428.1 GI:27950530
KEYWORDS
SOURCE synthetic construct

ORGANISM synthetic construct
other sequences; artificial sequences.
REFERENCE 1
AUTHORS Fearon,K.L. and Dina,D.
TITLE Immunomodulatory polynucleotides and methods of using the same
JOURNAL Patent: WO 02052002-A 118 04-JUL-2002;
Dynavax Technologies Corporation (US)
FEATURES
source 1..14
/organism="synthetic construct"
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/note="Polynucleotide containing CG"
misc_feature 5
/note="n = 5-bromocytosine"
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Query Match 68.0%; Score 6.8; DB 6; Length 14;
Best Local Similarity 66.7%; Pred. No. 9.6e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
QY 2 DANCCKTCG 10
: || ||: ||
Db 6 GACCGTTCG 14
RESULT 59
AX592429
LOCUS AX592429 14 bp DNA linear PAT 27-JAN-2003
DEFINITION Sequence 119 from Patent WO02052002.
ACCESSION AX592429
VERSION AX592429.1 GI:27950531
KEYWORDS
SOURCE synthetic construct
ORGANISM synthetic construct
other sequences; artificial sequences.
REFERENCE 1
AUTHORS Fearon,K.L. and Dina,D.
TITLE Immunomodulatory polynucleotides and methods of using the same
JOURNAL Patent: WO 02052002-A 119 04-JUL-2002;
Dynavax Technologies Corporation (US)
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/db_xref="taxon:32630"
/note="Polynucleotide containing CG"
misc_feature 5
/note="n = 5-bromocytosine"
ORIGIN
Query Match 68.0%; Score 6.8; DB 6; Length 14;
Best Local Similarity 66.7%; Pred. No. 9.6e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
QY 2 DANCCKTCG 10
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Db 6 GACCGTTCG 14
RESULT 60
A11090
LOCUS A11090 15 bp DNA linear PAT 03-DEC-1993
DEFINITION Oligonucleotide L10.
ACCESSION A11090
VERSION A11090.1 GI:490940
KEYWORDS
SOURCE synthetic construct
ORGANISM synthetic construct
other sequences; artificial sequences.
REFERENCE 1 (bases 1 to 15)
AUTHORS Ikehara,M. and Kida,M.
TITLE Synthetic gene for human lysozyme

JOURNAL Patent: EP 0181634-A 34 21-MAY-1986;
Takeda Chemical Industries, Ltd
FEATURES
source
Location/Qualifiers
1. .15
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
ORIGIN
Query Match 68.0%; Score 6.8; DB 6; Length 15;
Best Local Similarity 66.7%; Pred. No. 9.6e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
QY 2 DANCGKTCG 10
:
Db 2 GAACGTCG 10
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RESULT 61
AR033261
LOCUS 15 bp DNA linear PAT 29-SEP-1999
DEFINITION Sequence 27 from patent US 5869253.
ACCESSION AR033261
VERSION AR033261.1 GI:5948866
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 15)
AUTHORS Draper,K.G.
TITLE Method and reagent for inhibiting hepatitis C virus replication
JOURNAL Patent: US 5869253-A 27 09-FEB-1999;
FEATURES Location/Qualifiers
source
1. .15
/organism="unknown"
/mol_type="unassigned DNA"
ORIGIN
Query Match 68.0%; Score 6.8; DB 6; Length 15;
Best Local Similarity 66.7%; Pred. No. 9.6e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
QY 2 DANCGKTCG 10
:
Db 1 TAGCGTTCG 9
:
RESULT 62
AR033565
LOCUS 15 bp DNA linear PAT 29-SEP-1999
DEFINITION Sequence 331 from patent US 5869253.
ACCESSION AR033565
VERSION AR033565.1 GI:5949170
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 15)
AUTHORS Draper,K.G.
TITLE Method and reagent for inhibiting hepatitis C virus replication
JOURNAL Patent: US 5869253-A 331 09-FEB-1999;
FEATURES Location/Qualifiers
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1. .15
/organism="unknown"
/mol_type="unassigned DNA"
ORIGIN
Query Match 68.0%; Score 6.8; DB 6; Length 15;
Best Local Similarity 66.7%; Pred. No. 9.6e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
QY 2 DANCGKTCG 10
:
Db 1 GAACGTCG 9
:
RESULT 63
AR033566
LOCUS 15 bp DNA linear PAT 29-SEP-1999
DEFINITION Sequence 332 from patent US 5869253.
ACCESSION AR033566
VERSION AR033566.1 GI:5949171
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 15)
AUTHORS Draper,K.G.
TITLE Method and reagent for inhibiting hepatitis C virus replication
JOURNAL Patent: US 5869253-A 332 09-FEB-1999;
FEATURES Location/Qualifiers
source
1. .15
/organism="unknown"
/mol_type="unassigned DNA"
ORIGIN
Query Match 68.0%; Score 6.8; DB 6; Length 15;
Best Local Similarity 66.7%; Pred. No. 9.6e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
QY 2 DANCGKTCG 10
:
Db 1 TAGCGTTCG 9
:
RESULT 64
AR113083
LOCUS 15 bp DNA linear PAT 16-MAY-2001
DEFINITION Sequence 27 from patent US 6132966.
ACCESSION AR113083
VERSION AR113083.1 GI:14093405
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 15)
AUTHORS Draper,K.G.
TITLE Method and reagent for inhibiting hepatitis C virus replication
JOURNAL Patent: US 6132966-A 27 17-OCT-2000;
FEATURES Location/Qualifiers
source
1. .15
/organism="unknown"
/mol_type="unassigned DNA"
ORIGIN
Query Match 68.0%; Score 6.8; DB 6; Length 15;
Best Local Similarity 66.7%; Pred. No. 9.6e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
QY 2 DANCGKTCG 10
:
Db 1 GAACGTCG 9
:
RESULT 65
AR113387
LOCUS 15 bp DNA linear PAT 16-MAY-2001
DEFINITION Sequence 331 from patent US 6132966.
ACCESSION AR113387
VERSION AR113387.1 GI:14093709
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 15)
AUTHORS Draper,K.G.

TITLE Method and reagent for inhibiting hepatitis C virus replication
JOURNAL Patent: US 6132966-A 331 17-OCT-2000;
FEATURES Location/Qualifiers

source
1. .15
/organism="unknown"
/mol_type="unassigned DNA"

ORIGIN
Query Match 68.0%; Score 6.8; DB 6; Length 15;
Best Local Similarity 66.7%; Pred. No. 9.6e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 2 DANCCKTCG 10
: || ||: |||
Db 2 TAGCGTTCG 10

RESULT 66
AR113388
LOCUS AR113388 15 bp DNA linear PAT 16-MAY-2001
DEFINITION Sequence 332 from patent US 6132966.
ACCESSION AR113388
VERSION AR113388.1 GI:14093710
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.

REFERENCE 1 (bases 1 to 15)
AUTHORS Draper, K.G.
TITLE Method and reagent for inhibiting hepatitis C virus replication
JOURNAL Patent: US 6132966-A 332 17-OCT-2000;
FEATURES Location/Qualifiers
source
1. .15
/organism="unknown"
/mol_type="unassigned DNA"

ORIGIN
Query Match 68.0%; Score 6.8; DB 6; Length 15;
Best Local Similarity 66.7%; Pred. No. 9.6e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 2 DANCCKTCG 10
: || ||: |||
Db 1 TAGCGTTCG 9

RESULT 67
AR123874
LOCUS AR123874 15 bp DNA linear PAT 16-MAY-2001
DEFINITION Sequence 7 from patent US 6171821.
ACCESSION AR123874
VERSION AR123874.1 GI:14109235
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.

REFERENCE 1 (bases 1 to 15)
AUTHORS Korneluk, R.G., Holcik, M. and Liston, P.
TITLE XIAP IRES and uses thereof
JOURNAL Patent: US 6171821-A 7 09-JAN-2001;
FEATURES Location/Qualifiers
source
1. .15
/organism="unknown"
/mol_type="unassigned DNA"

ORIGIN
Query Match 68.0%; Score 6.8; DB 6; Length 15;
Best Local Similarity 66.7%; Pred. No. 9.6e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 2 DANCCKTCG 10
: || ||: |||
Db 7 TAGCGTTCG 15

RESULT 68
AR123875/c

LOCUS AR123875 15 bp DNA linear PAT 16-MAY-2001
DEFINITION Sequence 8 from patent US 6171821.
ACCESSION AR123875
VERSION AR123875.1 GI:14109236
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.

REFERENCE 1 (bases 1 to 15)
AUTHORS Korneluk, R.G., Holcik, M. and Liston, P.
TITLE XIAP IRES and uses thereof
JOURNAL Patent: US 6171821-A 8 09-JAN-2001;
FEATURES Location/Qualifiers
source
1. .15
/organism="unknown"
/mol_type="unassigned DNA"

ORIGIN
Query Match 68.0%; Score 6.8; DB 6; Length 15;
Best Local Similarity 66.7%; Pred. No. 9.6e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 2 DANCCKTCG 10
: || ||: |||
Db 9 TAGCGTTCG 1

RESULT 69
AR123876/c

LOCUS AR123876 15 bp DNA linear PAT 16-MAY-2001
DEFINITION Sequence 9 from patent US 6171821.
ACCESSION AR123876
VERSION AR123876.1 GI:14109237
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.

REFERENCE 1 (bases 1 to 15)
AUTHORS Korneluk, R.G., Holcik, M. and Liston, P.
TITLE XIAP IRES and uses thereof
JOURNAL Patent: US 6171821-A 9 09-JAN-2001;
FEATURES Location/Qualifiers
source
1. .15
/organism="unknown"
/mol_type="unassigned DNA"

ORIGIN
Query Match 68.0%; Score 6.8; DB 6; Length 15;
Best Local Similarity 66.7%; Pred. No. 9.6e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 2 DANCCKTCG 10
: || ||: |||
Db 9 TAGCGTTCG 1

RESULT 70
AR174756

LOCUS AR174756 15 bp DNA linear PAT 17-DEC-2001
DEFINITION Sequence 9 from patent US 6307036.
ACCESSION AR174756
VERSION AR174756.1 GI:17915076
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.

REFERENCE 1 (bases 1 to 15)
AUTHORS Milner, J. and Veldhoen, N.
TITLE Tumour suppressor gene

JOURNAL Patent: US 6307036-A 9 23-OCT-2001;
 FEATURES Location/Qualifiers
 source 1..15
 /organism="unknown"
 /mol_type="unassigned DNA"

ORIGIN

Query Match 68.0%; Score 6.8; DB 6; Length 15;
 Best Local Similarity 66.7%; Pred. No. 9.6e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
 : |||:|
 Db 5 AAGCGGTCG 13

RESULT 71
 BD206994
 LOCUS 15 bp RNA linear PAT 17-JUL-2003
 DEFINITION Enzymatic nucleic acid treatment of diseases or conditions related to hepatitis C virus infection.

ACCESSION BD206994
 VERSION BD206994.1 GI:33016764
 KEYWORDS JP 2002512791-A/584.
 SOURCE unidentified
 ORGANISM unclassified.

REFERENCE 1 (bases 1 to 15)
 AUTHORS Blatt,L., Mcswiggen,J.A., Roberts,E., Pavco,P.A. and Macejak,D.
 TITLE Enzymatic nucleic acid treatment of diseases or conditions related to hepatitis C virus infection
 JOURNAL Patent: JP 2002512791-A 584 08-MAY-2002;
 COMMENT OS Hepatitis virus (hepatitis C virus)
 PN JP 2002512791-A/584
 PD 08-MAY-2002
 PF 26-APR-1999 JP 2000545991
 PR 27-APR-1998 US 60/083217,18-SEP-1998 US 60/100842 PR
 25-FEB-1999 US 09/257608,23-MAR-1999 US 09/274553 PI
 LAWRENCE BLATT,JAMES A MCSWIGGEN,ELISABETH ROBERTS,PAMELA A PI
 PAVCO,
 PI DENNIS MACEJAK
 PC C12N9/00,A61K31/7105,A61K38/21,A61K48/00,A61P31/12,C12N15/09,
 PC A61K37/66,
 PC C12N15/00
 CC Enzymatic nucleic acid treatment of diseases or conditions related to hepatitis C virus infection.
 CC hepatitis C virus infection.
 FH Key Location/Qualifiers
 FT source 1..15
 FT /organism='Hepatitis virus (hepatitis C virus)'

JOURNAL

COMMENT OS Hepatitis virus (hepatitis C virus)
 PN JP 2002512791-A/584
 PD 08-MAY-2002
 PF 26-APR-1999 JP 2000545991
 PR 27-APR-1998 US 60/083217,18-SEP-1998 US 60/100842 PR
 25-FEB-1999 US 09/257608,23-MAR-1999 US 09/274553 PI
 LAWRENCE BLATT,JAMES A MCSWIGGEN,ELISABETH ROBERTS,PAMELA A PI
 PAVCO,
 PI DENNIS MACEJAK
 PC C12N9/00,A61K31/7105,A61K38/21,A61K48/00,A61P31/12,C12N15/09,
 PC A61K37/66,
 PC C12N15/00
 CC Enzymatic nucleic acid treatment of diseases or conditions related to hepatitis C virus infection.
 CC hepatitis C virus infection.
 FH Key Location/Qualifiers
 FT source 1..15
 FT /organism='Hepatitis virus (hepatitis C virus)'

FEATURES source
 1..15
 /organism="unidentified"
 /mol_type="genomic RNA"
 /db_xref="taxon:32644"

ORIGIN

Query Match 68.0%; Score 6.8; DB 6; Length 15;
 Best Local Similarity 66.7%; Pred. No. 9.6e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
 : |||:|
 Db 2 TAGCGGTCG 10

RESULT 73
 BD207299
 LOCUS 15 bp RNA linear PAT 17-JUL-2003
 DEFINITION Enzymatic nucleic acid treatment of diseases or conditions related to hepatitis C virus infection.

ACCESSION BD207299
 VERSION BD207299.1 GI:33017069
 KEYWORDS JP 2002512791-A/889.
 SOURCE unidentified
 ORGANISM unclassified.

REFERENCE 1 (bases 1 to 15)
 AUTHORS Blatt,L., Mcswiggen,J.A., Roberts,E., Pavco,P.A. and Macejak,D.
 TITLE Enzymatic nucleic acid treatment of diseases or conditions related to hepatitis C virus infection
 JOURNAL Patent: JP 2002512791-A 889 08-MAY-2002;
 COMMENT OS Hepatitis virus (hepatitis C virus)
 PN JP 2002512791-A/889
 PD 08-MAY-2002
 PF 26-APR-1999 JP 2000545991
 PR 27-APR-1998 US 60/083217,18-SEP-1998 US 60/100842 PR
 25-FEB-1999 US 09/257608,23-MAR-1999 US 09/274553 PI
 LAWRENCE BLATT,JAMES A MCSWIGGEN,ELISABETH ROBERTS,PAMELA A PI
 PAVCO,
 PI DENNIS MACEJAK
 PC C12N9/00,A61K31/7105,A61K38/21,A61K48/00,A61P31/12,C12N15/09,
 PC A61K37/66,
 PC C12N15/00
 CC Enzymatic nucleic acid treatment of diseases or conditions related to hepatitis C virus infection.
 CC hepatitis C virus infection.
 FH Key Location/Qualifiers
 FT source 1..15
 FT /organism='Hepatitis virus (hepatitis C virus)'

FEATURES source
 1..15
 /organism="unidentified"
 /mol_type="genomic RNA"
 /db_xref="taxon:32644"

ORIGIN

Query Match 68.0%; Score 6.8; DB 6; Length 15;
 Best Local Similarity 66.7%; Pred. No. 9.6e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
 : |||:|
 Db 1 GAACGGTCG 9

RESULT 72
 BD207298
 LOCUS 15 bp RNA linear PAT 17-JUL-2003
 DEFINITION Enzymatic nucleic acid treatment of diseases or conditions related to hepatitis C virus infection.

ACCESSION BD207298
 VERSION BD207298.1 GI:33017068
 KEYWORDS JP 2002512791-A/888.
 SOURCE unidentified
 ORGANISM unclassified.

REFERENCE 1 (bases 1 to 15)
 AUTHORS Blatt,L., Mcswiggen,J.A., Roberts,E., Pavco,P.A. and Macejak,D.
 TITLE Enzymatic nucleic acid treatment of diseases or conditions related to hepatitis C virus infection
 JOURNAL Patent: JP 2002512791-A 888 08-MAY-2002;
 COMMENT OS Hepatitis virus (hepatitis C virus)
 PN JP 2002512791-A/888
 PD 08-MAY-2002
 PF 26-APR-1999 JP 2000545991
 PR 27-APR-1998 US 60/083217,18-SEP-1998 US 60/100842 PR
 25-FEB-1999 US 09/257608,23-MAR-1999 US 09/274553 PI
 LAWRENCE BLATT,JAMES A MCSWIGGEN,ELISABETH ROBERTS,PAMELA A PI
 PAVCO,
 PI DENNIS MACEJAK
 PC C12N9/00,A61K31/7105,A61K38/21,A61K48/00,A61P31/12,C12N15/09,
 PC A61K37/66,
 PC C12N15/00
 CC Enzymatic nucleic acid treatment of diseases or conditions related to hepatitis C virus infection.
 CC hepatitis C virus infection.
 FH Key Location/Qualifiers
 FT source 1..15
 FT /organism='Hepatitis virus (hepatitis C virus)'

FEATURES source
 1..15
 /organism="unidentified"
 /mol_type="genomic RNA"
 /db_xref="taxon:32644"

ORIGIN

Query Match 68.0%; Score 6.8; DB 6; Length 15;
 Best Local Similarity 66.7%; Pred. No. 9.6e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
 : |||:|
 Db 2 TAGCGGTCG 10

RESULT 73
 BD207299
 LOCUS 15 bp RNA linear PAT 17-JUL-2003
 DEFINITION Enzymatic nucleic acid treatment of diseases or conditions related to hepatitis C virus infection.

ACCESSION BD207299
 VERSION BD207299.1 GI:33017069
 KEYWORDS JP 2002512791-A/889.
 SOURCE unidentified
 ORGANISM unclassified.

REFERENCE 1 (bases 1 to 15)
 AUTHORS Blatt,L., Mcswiggen,J.A., Roberts,E., Pavco,P.A. and Macejak,D.
 TITLE Enzymatic nucleic acid treatment of diseases or conditions related to hepatitis C virus infection
 JOURNAL Patent: JP 2002512791-A 889 08-MAY-2002;
 COMMENT OS Hepatitis virus (hepatitis C virus)
 PN JP 2002512791-A/889
 PD 08-MAY-2002
 PF 26-APR-1999 JP 2000545991
 PR 27-APR-1998 US 60/083217,18-SEP-1998 US 60/100842 PR
 25-FEB-1999 US 09/257608,23-MAR-1999 US 09/274553 PI
 LAWRENCE BLATT,JAMES A MCSWIGGEN,ELISABETH ROBERTS,PAMELA A PI
 PAVCO,
 PI DENNIS MACEJAK
 PC C12N9/00,A61K31/7105,A61K38/21,A61K48/00,A61P31/12,C12N15/09,
 PC A61K37/66,
 PC C12N15/00
 CC Enzymatic nucleic acid treatment of diseases or conditions related to hepatitis C virus infection.
 CC hepatitis C virus infection.
 FH Key Location/Qualifiers
 FT source 1..15
 FT /organism='Hepatitis virus (hepatitis C virus)'

REFERENCE 1 (bases 1 to 15)
AUTHORS Draper,K.G.
TITLE Enzymatic RNA molecule targeted against Hepatitis C virus
JOURNAL Patent: US 5610054-A 332 11-MAR-1997;
FEATURES Location/Qualifiers
source
1. .15
/organism="unknown"
/mol_type="unassigned DNA"

ORIGIN

Query Match 68.0%; Score 6.8; DB 6; Length 15;
Best Local Similarity 66.7%; Pred. No. 9.6e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: |||: |||
Db 1 TAGCGTTCG 9

RESULT 78
AR234358
LOCUS 15 bp DNA linear PAT 20-DEC-2002
DEFINITION Sequence 12 from patent US 6458567.
ACCESSION AR234358
VERSION AR234358.1 GI:27277046
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
Unclassified.

REFERENCE 1 (bases 1 to 15)
AUTHORS Barber,J.R., Welch,P.J., Tritz,R., Yei,S. and Yu,M.
TITLE Hepatitis C Virus ribozymes
JOURNAL Patent: US 6458567-A 12 01-OCT-2002;
FEATURES Location/Qualifiers
source
1. .15
/organism="unknown"
/mol_type="genomic DNA"

ORIGIN

Query Match 68.0%; Score 6.8; DB 6; Length 15;
Best Local Similarity 66.7%; Pred. No. 9.6e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: |||: |||
Db 1 GACCGGTTCG 9

RESULT 79
AR234473/c
LOCUS 15 bp DNA linear PAT 20-DEC-2002
DEFINITION Sequence 6 from patent US 6458584.
ACCESSION AR234473
VERSION AR234473.1 GI:27277177
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
Unclassified.

REFERENCE 1 (bases 1 to 15)
AUTHORS Mirzabekov,A., Guschin,D.Y., Chik,V., Drobyshev,A., Fotin,A.,
Yershov,G. and Lysov,Y.
TITLE Customized oligonucleotide microchips that convert multiple genetic
information to simple patterns, are portable and reusable
JOURNAL Patent: US 6458584-A 6 01-OCT-2002;
FEATURES Location/Qualifiers
source
1. .15
/organism="unknown"
/mol_type="genomic DNA"

ORIGIN

Query Match 68.0%; Score 6.8; DB 6; Length 15;
Best Local Similarity 66.7%; Pred. No. 9.6e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: |||: |||
Db 11 GACCGGTTCG 3

RESULT 80
AR362715
LOCUS 15 bp DNA linear PAT 03-SEP-2003
DEFINITION Sequence 49 from patent US 5182195.
ACCESSION AR362715
VERSION AR362715.1 GI:34423095
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
Unclassified.

REFERENCE 1 (bases 1 to 15)
AUTHORS Nakahama,K., Kaisho,Y. and Yoshimura,K.
TITLE Method for increasing gene expression using protease deficient
Yeasts
JOURNAL Patent: US 5182195-A 49 26-JAN-1993;
FEATURES Location/Qualifiers
source
1. .15
/organism="unknown"
/mol_type="genomic DNA"

ORIGIN

Query Match 68.0%; Score 6.8; DB 6; Length 15;
Best Local Similarity 66.7%; Pred. No. 9.6e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: |||: |||
Db 2 GACCGGTTCG 10

RESULT 81
AX004379/c
LOCUS 15 bp DNA linear PAT 24-AUG-2000
DEFINITION Sequence 1 from Patent WO9918234.
ACCESSION AX004379
VERSION AX004379.1 GI:9927856
KEYWORDS
SOURCE synthetic construct
ORGANISM synthetic construct
other sequences; artificial sequences.

REFERENCE 1
AUTHORS Wagner,M. and Manem,J.
TITLE Means for qualitative and quantitative analysis of microbial
populations potentially present in a sample
JOURNAL Patent: WO 9918234-A 1 15-APR-1999;
FEATURES WAGNER MICHAEL (DE); SUEZ LYONNAISE DES EAUX (FR)
Location/Qualifiers
source
1. .15
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"

ORIGIN

Query Match 68.0%; Score 6.8; DB 6; Length 15;
Best Local Similarity 66.7%; Pred. No. 9.6e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: |||: |||
Db 11 GACCGGTTCG 3

RESULT 82
AX592418
LOCUS 15 bp DNA linear PAT 27-JAN-2003
DEFINITION Sequence 108 from Patent WO02052002.
ACCESSION AX592418

VERSION AX592418.1 GI:27950520
 KEYWORDS synthetic construct
 SOURCE synthetic construct
 ORGANISM other sequences; artificial sequences.
 REFERENCE 1
 AUTHORS Fearon,K.L. and Dina,D.
 TITLE Immunomodulatory polynucleotides and methods of using the same
 JOURNAL Patent: WO 02052002-A 108 04-JUL-2002;
 Dynavax Technologies Corporation (US)
 FEATURES Location/Qualifiers
 source 1..15
 /organism="synthetic construct"
 /mol_type="unassigned DNA"
 /db_xref="taxon:32630"
 /note="Polynucleotide containing CG"
 ORIGIN
 Query Match 68.0%; Score 6.8; DB 6; Length 15;
 Best Local Similarity 66.7%; Pred. No. 9.6e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
 QY 2 DANCCKTCG 10
 :|||:||||
 Db 7 GAACGTTTCG 15
 RESULT 83
 AX663401/c
 LOCUS AX663401 15 bp DNA linear PAT 22-MAR-2003
 DEFINITION Sequence 27 from Patent WO02097126.
 ACCESSION AX663401
 VERSION AX663401.1 GI:29163741
 KEYWORDS synthetic construct
 SOURCE synthetic construct
 ORGANISM other sequences; artificial sequences.
 REFERENCE 1
 AUTHORS Weizenegger,M.
 TITLE Method for detecting gram-positive bacteria
 JOURNAL Patent: WO 02097126-A 27 05-DEC-2002;
 Hain Lifescience GmbH (DE)
 FEATURES Location/Qualifiers
 source 1..15
 /organism="synthetic construct"
 /mol_type="unassigned DNA"
 /db_xref="taxon:32630"
 /note="Sonde"
 ORIGIN
 Query Match 68.0%; Score 6.8; DB 6; Length 15;
 Best Local Similarity 66.7%; Pred. No. 9.6e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
 QY 2 DANCCKTCG 10
 :|||:||||
 Db 12 GAACGTTTCG 4
 RESULT 84
 BD076708/c
 LOCUS BD076708 15 bp DNA linear PAT 27-AUG-2002
 DEFINITION Method of qualitatively and quantitatively assaying micropopulation
 likely contained in sample.
 ACCESSION BD076708
 VERSION BD076708.1 GI:22622311
 KEYWORDS JP 2001519168-A/1.
 SOURCE synthetic construct
 ORGANISM other sequences; artificial sequences.
 REFERENCE 1 (bases 1 to 15)
 AUTHORS Geeyow,E., Urbain,V., Mannern,B.E., Littmann,B.E., Stall,D.A.,
 Flaccus,J. and Wagner,M.

TITLE Method of qualitatively and quantitatively assaying micropopulation
 likely contained in sample
 JOURNAL Patent: JP 2001519168-A 1 23-OCT-2001;
 SUEZ LYONNAISE DES EAUX,NORTHWESTERN UNIVERSITY
 COMMENT OS Artificial Sequence
 PN JP 2001519168-A/1
 PD 23-OCT-2001
 PF 02-OCT-1998 JP 2000515026
 PR 08-OCT-1997 FR 97/12552
 PI EMMANUEL GEYOW,VINCERT URBAIN,JACK MANNERN,BRUCE E LITTMANN,
 DAVID A STALL,JODY FLACCUS,MICHAEL WAGNER
 PC C12N15/09,C12Q1/68,C12N15/00
 CC Description of Artificial Sequence : primer_bind FH Key
 Location/Qualifiers
 FT source 1..15
 /organism="Artificial Sequence".
 FEATURES Location/Qualifiers
 source 1..15
 /organism="synthetic construct"
 /mol_type="genomic DNA"
 /db_xref="taxon:32630"
 ORIGIN
 Query Match 68.0%; Score 6.8; DB 6; Length 15;
 Best Local Similarity 66.7%; Pred. No. 9.6e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
 QY 2 DANCCKTCG 10
 :|||:||||
 Db 11 GACCCGTCG 3
 RESULT 85
 AR176673
 LOCUS AR176673 16 bp DNA linear PAT 17-DEC-2001
 DEFINITION Sequence 4 from patent US 6312894.
 ACCESSION AR176673
 VERSION AR176673.1 GI:17919028
 KEYWORDS Unknown.
 SOURCE Unknown.
 ORGANISM Unclassified.
 REFERENCE 1 (bases 1 to 16)
 AUTHORS Hedgpeth,J., Afonina,I.A., Kutayavin,I.V., Lukhtanov,E.A.,
 Belousov,E.S. and Meyer,R.B. Jr.
 TITLE Hybridization and mismatch discrimination using oligonucleotides
 conjugated to minor groove binders
 JOURNAL Patent: US 6312894-A 4 06-NOV-2001;
 FEATURES Location/Qualifiers
 source 1..16
 /organism="unknown"
 /mol_type="unassigned DNA"
 ORIGIN
 Query Match 68.0%; Score 6.8; DB 6; Length 16;
 Best Local Similarity 66.7%; Pred. No. 9.6e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
 QY 2 DANCCKTCG 10
 :|||:||||
 Db 4 TAACGTTTCG 12
 RESULT 86
 BD260024
 LOCUS BD260024 16 bp DNA linear PAT 17-JUL-2003
 DEFINITION Hybridization and mismatch discrimination using oligonucleotides
 conjugated to minor groove binders.
 ACCESSION BD260024
 VERSION BD260024.1 GI:33069794
 KEYWORDS JP 2002527040-A/4.
 SOURCE Escherichia coli
 ORGANISM Escherichia coli

Bacteria; Proteobacteria; Gammaproteobacteria; Enterobacteriales; Enterobacteriaceae; Escherichia.

REFERENCE 1 (bases 1 to 16)

AUTHORS Hedgpeth, J., Afonina, I. A., Kutayavin, I. V., Lukhtanov, E. A., Belousov, E. S. and Jr, R. B. M.

TITLE Hybridization and mismatch discrimination using oligonucleotides conjugated to minor groove binders

JOURNAL Patent: JP 2002527040-A 4 27-AUG-2002;

COMMENT EPOCH BIOSCIENCES INC

OS Escherichia coli

PN JP 2002527040-A/4

PD 27-AUG-2002

PF 05-APR-1999 JP 2000542342

PR 03-APR-1998 US 09/054832

PI JOEL HEDGPETH, IRINA A AFONINA, IGOR V KUTYAVIN, EUGENY A PI LUKHTANOV,

PC EVGENIY S BELOUSOV, RICH B MEYER JR

PC C12N15/09, C12N15/09, C07H21/02, C12Q1/68, G01N21/78, PC G01N33/483,

PC G01N33/53, G01N33/566, C12N15/00, C12N15/00

CC Hybridization and mismatch discrimination using CC oligonucleotides

CC conjugated to minor groove binders

FH Key Location/Qualifiers

FT source 1..16

FT Location/Qualifiers

source 1..16

/organism="Escherichia coli"

/mol_type="genomic DNA"

/db_xref="taxon:562"

ORIGIN

Query Match 68.0%; Score 6.8; DB 6; Length 16;

Best Local Similarity 66.7%; Pred. No. 9.6e+05;

Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10

DB 4 TAACGTCG 12

RESULT 87

CQ808457

LOCUS 16 bp DNA linear PAT 10-MAY-2004

DEFINITION Sequence 1907 from Patent WO2004035803.

ACCESSION CQ808457

VERSION CQ808457.1 GI:47113851

KEYWORDS synthetic construct

SOURCE synthetic construct

ORGANISM other sequences; artificial sequences.

REFERENCE 1

AUTHORS Foekens, J., Harbeck, N., Koenig, T., Maier, S., Martens, J., Model, F., Nimrich, I., Rujan, T., Schmitt, A., Schmitt, M., Look, M. P. and Marx, A.

TITLE Method and nucleic acids for the improved treatment of breast cell proliferative disorders

JOURNAL Patent: WO 2004035803-A 1907 29-APR-2004;

Epigenomics AG (DE)

FEATURES Location/Qualifiers

source 1..16

/organism="synthetic construct"

/mol_type="unassigned DNA"

/db_xref="taxon:32630"

/note="Detection oligonucleotide for CTS1"

ORIGIN

Query Match 68.0%; Score 6.8; DB 6; Length 16;

Best Local Similarity 66.7%; Pred. No. 9.6e+05;

Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10

DB 1 GAGCGTTCG 9

RESULT 88

AR234357

LOCUS 16 bp DNA linear PAT 20-DEC-2002

DEFINITION Sequence 11 from patent US 6458567.

ACCESSION AR234357

VERSION AR234357.1 GI:27277045

KEYWORDS

SOURCE Unknown.

ORGANISM Unknown.

REFERENCE 1 (bases 1 to 16)

AUTHORS Barber, J. R., Welch, P. J., Tritz, R., Ye, S. and Yu, M.

TITLE Hepatitis C Virus ribozymes

JOURNAL Patent: US 6458567-A 11 01-OCT-2002;

FEATURES Location/Qualifiers

source 1..16

/organism="unknown"

/mol_type="genomic DNA"

ORIGIN

Query Match 68.0%; Score 6.8; DB 6; Length 16;

Best Local Similarity 66.7%; Pred. No. 9.6e+05;

Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10

DB 1 GAGCGTTCG 9

RESULT 89

AR474438

LOCUS 16 bp DNA linear PAT 20-FEB-2004

DEFINITION Sequence 37 from patent US 6691568.

ACCESSION AR474438

VERSION AR474438.1 GI:42713318

KEYWORDS

SOURCE Unknown.

ORGANISM Unknown.

REFERENCE 1 (bases 1 to 16)

AUTHORS Akamatsu, M.

TITLE Air meter

JOURNAL Patent: US 6691568-A 37 17-FEB-2004;

FEATURES Location/Qualifiers

source 1..16

/organism="unknown"

/mol_type="genomic DNA"

ORIGIN

Query Match 68.0%; Score 6.8; DB 6; Length 16;

Best Local Similarity 66.7%; Pred. No. 9.6e+05;

Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10

DB 1 TATCGTTCG 9

RESULT 90

AR475502

LOCUS 16 bp DNA linear PAT 20-FEB-2004

DEFINITION Sequence 37 from patent US 6692954.

ACCESSION AR475502

VERSION AR475502.1 GI:42714985

KEYWORDS

SOURCE Unknown.

ORGANISM Unknown.

REFERENCE 1 (bases 1 to 16)

AUTHORS Ghazal, P. and Huang, H.
 TITLE Generation of human cytomegalovirus yeast artificial chromosome recombinants
 JOURNAL Patent: US 6692954-A 37 17-FEB-2004;
 FEATURES Location/Qualifiers
 source 1..16
 /organism="unknown"
 /mol_type="genomic DNA"

ORIGIN

Query Match 68.0%; Score 6.8; DB 6; Length 16;
 Best Local Similarity 66.7%; Pred. No. 9.6e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 2 DANCCKTCG 10
 :|||:|
 Db 1 TATCGTTCG 9

RESULT 91
 LOCUS AX194461 16 bp DNA linear PAT 28-AUG-2001
 DEFINITION Sequence 61 from Patent WO0151500.
 ACCESSION AX194461
 VERSION AX194461.1 GI:15385117
 KEYWORDS
 ORGANISM
 SOURCE synthetic construct
 other sequences; artificial sequences.
 REFERENCE 1
 AUTHORS Klinman, D., Ishii, K. and Verthelyi, D.
 TITLE Oligodeoxynucleotide and its use to induce an immune response
 JOURNAL Patent: WO 0151500-A 61 19-JUL-2001;
 Secretary of the Department of Health and Human Services (US)
 FEATURES
 source 1..16
 /organism="synthetic construct"
 /mol_type="unassigned DNA"
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 /note="Synthetic DNA"

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 Best Local Similarity 66.7%; Pred. No. 9.6e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 2 DANCCKTCG 10
 :|||:|
 Db 5 GAACGTTTCG 13

RESULT 92
 LOCUS AX465411 16 bp DNA linear PAT 16-JUL-2002
 DEFINITION Sequence 79 from Patent WO0211761.
 ACCESSION AX465411
 VERSION AX465411.1 GI:21899774
 KEYWORDS
 SOURCE synthetic construct
 other sequences; artificial sequences.
 ORGANISM
 REFERENCE 1
 AUTHORS Mond, J.J., Prince, G. and Kliman, D.M.
 TITLE Vaccine against RSV
 JOURNAL Patent: WO 0211761-A 79 14-FEB-2002;
 HENRY M. JACKSON FOUNDATION FOR THE ADVANCEMENT OF MILITARY MEDICINE (US)
 FEATURES
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 /note="Synthetic oligonucleotide"

ORIGIN

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 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 2 DANCCKTCG 10
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 Db 5 GAACGTTTCG 13

RESULT 93
 LOCUS AX592321 16 bp DNA linear PAT 27-JAN-2003
 DEFINITION Sequence 11 from Patent WO02052002.
 ACCESSION AX592321
 VERSION AX592321.1 GI:27950423
 KEYWORDS
 ORGANISM
 SOURCE synthetic construct
 other sequences; artificial sequences.
 REFERENCE 1
 AUTHORS Fearon, K.L. and Dina, D.
 TITLE Immunomodulatory polynucleotides and methods of using the same
 JOURNAL Patent: WO 02052002-A 11 04-JUL-2002;
 Dynavax Technologies Corporation (US)
 FEATURES
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ORIGIN

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 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 2 DANCCKTCG 10
 :|||:|
 Db 6 GAACGTTTCG 14

RESULT 94
 LOCUS AX592321/c 16 bp DNA linear PAT 27-JAN-2003
 DEFINITION Sequence 11 from Patent WO02052002.
 ACCESSION AX592321
 VERSION AX592321.1 GI:27950423
 KEYWORDS
 SOURCE synthetic construct
 other sequences; artificial sequences.
 ORGANISM
 REFERENCE 1
 AUTHORS Fearon, K.L. and Dina, D.
 TITLE Immunomodulatory polynucleotides and methods of using the same
 JOURNAL Patent: WO 02052002-A 11 04-JUL-2002;
 Dynavax Technologies Corporation (US)
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Qy 2 DANCCKTCG 10
 :|||:|
 Db 13 GAACGTTTCG 5

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RESULT 95
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LOCUS AX592423
DEFINITION Sequence 113 from Patent WO02052002.
ACCESSION AX592423
VERSION AX592423.1 GI:27950525
KEYWORDS
SOURCE
ORGANISM
REFERENCE
AUTHORS
TITLE Immunomodulatory polynucleotides and methods of using the same
JOURNAL Patent: WO 02052002-A 113 04-JUL-2002;
DynaVax Technologies Corporation (US)
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Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 2 DANCCKTCG 10
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Db 8 GAACGTTTCG 16

RESULT 96
AX592427
LOCUS AX592427
DEFINITION Sequence 117 from Patent WO02052002.
ACCESSION AX592427
VERSION AX592427.1 GI:27950529
KEYWORDS
SOURCE
ORGANISM
REFERENCE
AUTHORS
TITLE Immunomodulatory polynucleotides and methods of using the same
JOURNAL Patent: WO 02052002-A 117 04-JUL-2002;
DynaVax Technologies Corporation (US)
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/notes="Polynucleotide containing CG"
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/notes="n = 5-bromocytosine"
ORIGIN
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Best Local Similarity 66.7%; Pred. No. 9.6e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 2 DANCCKTCG 10
: |||:
Db 8 GAACGTTTCG 16

RESULT 97
AX592427
LOCUS AX592427
DEFINITION Sequence 117 from Patent WO02052002.
ACCESSION AX592427
VERSION AX592427.1 GI:27950529
KEYWORDS
SOURCE
ORGANISM
REFERENCE
AUTHORS
TITLE Immunomodulatory polynucleotides and methods of using the same
JOURNAL Patent: WO 02052002-A 117 04-JUL-2002;
DynaVax Technologies Corporation (US)
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Qy 2 DANCCKTCG 10
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Db 8 GAACGTTTCG 16

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LOCUS AX686160
DEFINITION Sequence 37 from Patent WO02057437.
ACCESSION AX686160
VERSION AX686160.1 GI:29371994
KEYWORDS
SOURCE
ORGANISM
REFERENCE
AUTHORS
TITLE Generation of human cytomegalovirus yeast artificial chromosome recombinants
JOURNAL Patent: WO 02057437-A 37 25-JUL-2002;
The Scripps Research Institute (US)
FEATURES
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1. .16
Location/Qualifiers
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Best Local Similarity 66.7%; Pred. No. 9.6e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 2 DANCCKTCG 10
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Db 1 TATCGTTTCG 9

RESULT 98
AR040387
LOCUS AR040387
DEFINITION Sequence 1235 from patent US 5807743.
ACCESSION AR040387
VERSION AR040387.1 GI:5959750
KEYWORDS
SOURCE
ORGANISM
REFERENCE
AUTHORS
TITLE Stinchcomb,D.T. and McSwiggen,J.A.
JOURNAL Interleukin-2 receptor gamma-chain ribozymes
FEATURES
source
1. .17
Location/Qualifiers
/organism="unknown"
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ORIGIN
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Best Local Similarity 66.7%; Pred. No. 9.6e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 2 DANCCKTCG 10
: |||:
Db 2 GAACGTCG 10

RESULT 99
CQ774568/c
LOCUS CQ774568/c
DEFINITION Sequence 7 from Patent WO2004013168.
ACCESSION CQ774568
VERSION CQ774568.1 GI:45237789
KEYWORDS
SOURCE
ORGANISM
REFERENCE
AUTHORS
TITLE synthetic construct
JOURNAL synthetic construct
FEATURES
source
1
other sequences; artificial sequences.
Selvaraj,G., Wang,A., Xia,Q., Xie,W. and Datla,R.

```

TITLE Raftin gene, product, and use thereof
 JOURNAL Patent: WO 2004013168-A 7 12-FEB-2004;
 NATIONAL RESEARCH COUNCIL OF CANADA (CA)

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Qy 2 DANCCKTCG 10
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 Db 12 AAGCGTTCG 4

RESULT 100

CQ774576
 LOCUS 17 bp DNA linear PAT 06-MAR-2004
 DEFINITION Sequence 15 from Patent WO2004013168.
 ACCESSION CQ774576
 VERSION CQ774576.1 GI:45237797

KEYWORDS
 SOURCE synthetic construct
 ORGANISM other sequences; artificial sequences.

REFERENCE 1
 AUTHORS Selvaraj,G., Wang,A., Xia,Q., Xie,W. and Datla,R.
 TITLE Raftin gene, product, and use thereof

JOURNAL Patent: WO 2004013168-A 15 12-FEB-2004;
 NATIONAL RESEARCH COUNCIL OF CANADA (CA)

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Qy 2 DANCCKTCG 10
 :|:|:|:
 Db 6 AAGCGTTCG 14

Search completed: June 30, 2005, 01:07:01
 Job time : 860.5 secs

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GenCore version 5.1.6
Copyright (c) 1993 - 2005 CompuGen Ltd.

OM nucleic - nucleic search, using sw model

Run on: June 29, 2005, 16:33:43 ; Search time 219.5 Seconds
(without alignments)
269.692 Million cell updates/sec

Title: US-10-033-243-62

Perfect score: 10

Sequence: 1 ndancgkctg 10

Scoring table: IDENTITY NUC

Gapop 10.0 , Gapext 1.0

Searched: 4390206 seqs, 2959870667 residues

Total number of hits satisfying chosen parameters: 8780412

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 100 summaries

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3: Geneseqn2000s:*

4: Geneseqn2001as:*

5: Geneseqn2001bs:*

6: Geneseqn2002as:*

7: Geneseqn2002bs:*

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9: Geneseqn2003bs:*

10: Geneseqn2003cs:*

11: Geneseqn2003ds:*

12: Geneseqn2004as:*

13: Geneseqn2004bs:*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

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2	6.8	68.0	10	6 ABQ75130	Abq75130 ISS immun
3	6.8	68.0	10	6 ABQ75136	Abq75136 ISS immun
C 4	6.8	68.0	10	6 ABQ75136	Abq75136 ISS immun
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8	6.8	68.0	10	6 ABQ75150	Abq75150 ISS immun
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Abq75147	ISS immun	10	6 ABQ75147	68.0	6.8	22
Abq75147	ISS immun	10	6 ABQ75147	68.0	6.8	C 23
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Adb88818	Chimeric	10	9 ADB88818	68.0	6.8	25
Adb88815	Chimeric	10	9 ADB88815	68.0	6.8	26
Adb88815	Chimeric	10	9 ADB88815	68.0	6.8	C 27
Adb88816	Chimeric	10	9 ADB88816	68.0	6.8	28
Adb88807	Chimeric	10	9 ADB88807	68.0	6.8	29
Adb88805	Chimeric	10	9 ADB88805	68.0	6.8	30
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Adb88811	Chimeric	10	9 ADB88811	68.0	6.8	32
Adb88802	Chimeric	10	9 ADB88802	68.0	6.8	33
Adb88819	Chimeric	10	9 ADB88819	68.0	6.8	34
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Adb88803	Chimeric	10	9 ADB88803	68.0	6.8	38
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Adb88817	Chimeric	10	9 ADB88817	68.0	6.8	43
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Adq95275	Branched	10	12 ADQ95275	68.0	6.8	81
Adq95275	Branched	10	12 ADQ95275	68.0	6.8	C 82
Adq95315	Branched	10	12 ADQ95315	68.0	6.8	83
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Adq95276	Branched	10	12 ADQ95276	68.0	6.8	85
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Adq95270	Branched	10	12 ADQ95270	68.0	6.8	87
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100 6.8 68.0 11 6 ABQ75229 Abq75229 ISS immun

ALIGNMENTS

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ID AAF34378 standard; DNA; 10 BP.
XX
AC AAF34378;
XX
DT 23-MAR-2001 (first entry)
XX
DE Yeast NORF gene SAGE tag oligonucleotide SEQ ID NO:1117.
XX
KW Yeast; Saccharomyces cerevisiae; characterisation; cell cycle; NORF;
KW nor previously assigned open reading frame; nonannotated ORF; SAGE;
KW serial analysis of gene expression; antifungal; tag; identification;
KW linker; PCR primer; ds.
XX
OS Saccharomyces cerevisiae.
XX
PN WO200077214-A2.
XX
PD 21-DEC-2000.
XX
PF 14-JUN-2000; 2000WO-US016223.
XX
PR 16-JUN-1999; 99US-00335032.
XX
PA (UYJO) UNIV JOHNS HOPKINS.
XX
PI Velulescu V, Vogelstein B, Kinzler K;
XX
DR WPI; 2001-061874/07.
XX
PT Yeast gene coding sequences comprising NORF genes with serial analysis of
PT gene expression (SAGE) tags, useful for studying, monitoring and
PT affecting phases of the cell cycle.
XX
PS Example; Page 39; 419pp; English.
XX
CC The present invention describes an isolated DNA molecule comprising a
CC coding sequence of a yeast gene selected from a group of 745 NORF (not
CC previously assigned open reading frame; or nonannotated ORF) genes
CC comprising a SAGE (serial analysis of gene expression) tag. Also
CC described are: (1) a method (M1) of using NORF genes to affect the cell
CC cycle comprising administering a NORF gene whose expression varies by at
CC least 10% between any two phases of the cell cycle selected from log
CC phase, S phase and G2/M; (2) a method (M2) for screening candidate
CC antifungal drugs comprising: (a) contacting a test substance with a yeast
CC cell; and (b) monitoring expression of a NORF gene whose expression
CC varies as in M1, where a test substance which modifies the expression of
CC the yeast gene is a candidate antifungal drug; (3) a method (M3) for
CC identifying human genes which are involved in cell cycle progression
CC comprising contacting human DNA with a probe which comprises at least 10
CC contiguous nucleotides of a NORF gene whose expression varies as in M1;
CC and (4) a method (M4) for identifying a candidate drug as a member of a
CC class of drugs having a characteristic effect on gene expression in a
CC yeast cell comprising contacting a yeast cell with a candidate drug and
CC monitoring expression in the yeast cell of at least 1 NORF gene whose
CC expression is affected by the class of drugs. The NORF genes may be used
CC to study, monitor and affect phases of the cell cycle, the differentially
CC expressed genes may be used as markers of phases of the cell cycle. The
CC methods may be used to identify candidate drugs which affect the cell
CC cycle and for identification of antifungal drugs. AAF33268 to AAF44064

CC represent SAGE tags used in the exemplification of the present invention.
CC AAF33262 to AAF33267 represent linkers and PCR primers used in the SAGE
CC method, in the exemplification of the present invention
XX
SQ Sequence 10 BP; 2 A; 3 C; 3 G; 2 T; 0 U; 0 Other;
Query Match 68.0%; Score 6.8; DB 5; Length 10; ✓
Best Local Similarity 66.7%; Pred. No. 2e+05; 1; Indels 0; Gaps 0;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
QY 2 DANCCKTCG 10
Db 10 AACCGTTCG 2
GGCTTGCCAA
CCGACGGTT
RESULT 2 117
ABQ75130
ID ABQ75130 standard; DNA; 10 BP.
XX
AC ABQ75130;
XX
DT 05-NOV-2002 (first entry)
XX
DE ISS immunomodulatory oligonucleotide SEQ ID NO:63.
XX
KW Immunostimulatory sequence; ISS: immunomodulatory; immune response;
KW allergy; asthma; infectious disease; interferon-gamma; IFN-gamma;
KW idiopathic pulmonary fibrosis; viral infection; mycobacterial disease;
KW malaria; leishmaniasis; toxoplasmosis; schistosomiasis; clonorchiasis;
KW immunoglobulin E; IGE-related disorder; anti-allergic; antiasthmatic;
KW virucide; antibacterial; protozoacide; ss.
XX
OS Synthetic.
XX
PN WO200252002-A2.
XX
PD 04-JUL-2002.
XX
PF 27-DEC-2001; 2001WO-US050821.
XX
PR 27-DEC-2000; 2000US-0258675P.
XX
PA (DYNA-) DYNAX TECHNOLOGIES CORP.
XX
PI Fearon KL, Dina D;
XX
DR WPI; 2002-657426/70.
XX
PT Immunomodulatory polynucleotide for modulating an immune response in a
PT subject suffering from disorders associated with Th2-type immune
PT response, e.g. allergy, or infectious disease, comprises an
PT immunostimulatory sequence.
XX
PS Disclosure; Page 5; 95pp; English.
XX
CC The present invention describes an immunomodulatory polynucleotide (I)
CC comprising an immunostimulatory sequence (ISS). Also described: (1) an
CC immunomodulatory composition comprising (1); (2) an immunomodulatory
CC polynucleotide/microcarrier (IMP/MC) complex, comprising (1) linked to a
CC biodegradable MC, where the MC is less than 10 micrometre in size; and
CC (3) a kit comprising (1). (1) has anti-allergic, antiasthmatic, virucide,
CC antibacterial and protozoacide activities, and can be used as a modulator
CC of immune response. (1) is useful for modulating an immune response in an
CC individual suffering from disorders associated with a Th2-type immune
CC response, especially an allergy or asthma, or an infectious disease. (1)
CC is also useful for increasing interferon-gamma (IFN-gamma) in an
CC individual having idiopathic pulmonary fibrosis, or IFN-alpha in an
CC individual having a viral infection. (1) is further useful for
CC ameliorating a symptom of an infectious disease caused by a cellular
CC pathogen such as mycobacterial disease, malaria, leishmaniasis,
CC toxoplasmosis, schistosomiasis and clonorchiasis in an individual, or a
CC symptom of an immunoglobulin E (IGE)-related disorder, preferably an
CC allergy-related disorder, in particular asthma in an individual. The

CC present sequence represents an immunomodulatory oligonucleotide which is
 CC specifically not claimed in the present invention
 XX
 SQ Sequence 10 BP; 2 A; 2 C; 3 G; 3 T; 0 U; 0 Other;
 Query Match 68.0%; Score 6.8; DB 6; Length 10;
 Best Local Similarity 66.7%; Pred. No. 2e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
 QY 2 DANCGRCTCG 10
 :|||:
 Db 2 GAACGTTTCG 10
 :|||:
 RESULT 3
 ABQ75136
 ID ABQ75136 standard; DNA; 10 BP. ✓
 XX
 AC ABQ75136;
 XX
 DT 05-NOV-2002 (first entry)
 XX
 DE ISS immunomodulatory oligonucleotide SEQ ID NO:77.
 XX
 KW Immunostimulatory sequence; ISS: immunomodulatory; immune response;
 allergy; asthma; infectious disease; interferon-gamma; IFN-gamma;
 idiopathic pulmonary fibrosis; viral infection; mycobacterial disease;
 malaria; leishmaniasis; toxoplasmosis; schistosomiasis; clonorchiasis;
 immunoglobulin E; IGE-related disorder; anti-allergic; antiasthmatic;
 virucide; antibacterial; protozoacide; ss.
 XX
 OS Synthetic.
 XX
 PN WO200252002-A2.
 XX
 PD 04-JUL-2002.
 XX
 PF 27-DEC-2001; 2001WO-US050821.
 XX
 PR 27-DEC-2000; 2000US-0258675P.
 XX
 PA (DYNA-) DYNAX TECHNOLOGIES CORP.
 XX
 PI Fearon KL, Dina D;
 XX
 WPI; 2002-657426/70.
 XX
 PT Immunomodulatory polynucleotide for modulating an immune response in a
 PT subject suffering from disorders associated with Th2-type immune
 PT response, e.g. allergy, or infectious disease, comprises an
 PT immunostimulatory sequence.
 XX
 PS Claim 3; Page 88; 95pp; English.
 XX
 CC The present invention describes an immunomodulatory polynucleotide (I)
 CC comprising an immunostimulatory sequence (ISS). Also described: (1) an
 CC immunomodulatory composition comprising (1); (2) an immunomodulatory
 CC polynucleotide/microcarrier (IMP/MC) complex, comprising (1) linked to a
 CC biodegradable MC, where the MC is less than 10 micrometre in size; and
 CC (3) a kit comprising (1). (1) has anti-allergic, antiasthmatic, virucide,
 CC antibacterial and protozoacide activities, and can be used as a modulator
 CC of immune response. (1) is useful for modulating an immune response in an
 CC individual suffering from disorders associated with a Th2-type immune
 CC response, especially an allergy or asthma, or an infectious disease. (I)
 CC is also useful for increasing interferon-gamma (IFN-gamma) in an
 CC individual having idiopathic pulmonary fibrosis, or IFN-alpha in an
 CC individual having a viral infection. (I) is further useful for
 CC ameliorating a symptom of an infectious disease caused by a cellular
 CC pathogen such as mycobacterial disease, malaria, leishmaniasis,
 CC toxoplasmosis, schistosomiasis and clonorchiasis in an individual, or a
 CC symptom of an immunoglobulin E (IGE)-related disorder, preferably an
 CC allergy-related disorder, in particular asthma in an individual. The
 CC present sequence represents an immunomodulatory oligonucleotide which is

CC specifically claimed in the present invention
 XX
 SQ Sequence 10 BP; 2 A; 3 C; 3 G; 2 T; 0 U; 0 Other;
 Query Match 68.0%; Score 6.8; DB 6; Length 10;
 Best Local Similarity 66.7%; Pred. No. 2e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
 QY 2 DANCGRCTCG 10
 :|||:
 Db 2 GAACGTTTCG 10
 :|||:
 RESULT 4
 ABQ75136/c
 ID ABQ75136 standard; DNA; 10 BP.
 XX
 AC ABQ75136;
 XX
 DT 05-NOV-2002 (first entry)
 XX
 DE ISS immunomodulatory oligonucleotide SEQ ID NO:77. ✓
 XX
 KW Immunostimulatory sequence; ISS: immunomodulatory; immune response;
 allergy; asthma; infectious disease; interferon-gamma; IFN-gamma;
 idiopathic pulmonary fibrosis; viral infection; mycobacterial disease;
 malaria; leishmaniasis; toxoplasmosis; schistosomiasis; clonorchiasis;
 immunoglobulin E; IGE-related disorder; anti-allergic; antiasthmatic;
 virucide; antibacterial; protozoacide; ss.
 XX
 OS Synthetic.
 XX
 PN WO200252002-A2.
 XX
 PD 04-JUL-2002.
 XX
 PF 27-DEC-2001; 2001WO-US050821.
 XX
 PR 27-DEC-2000; 2000US-0258675P.
 XX
 PA (DYNA-) DYNAX TECHNOLOGIES CORP.
 XX
 PI Fearon KL, Dina D;
 XX
 WPI; 2002-657426/70.
 XX
 PT Immunomodulatory polynucleotide for modulating an immune response in a
 PT subject suffering from disorders associated with Th2-type immune
 PT response, e.g. allergy, or infectious disease, comprises an
 PT immunostimulatory sequence.
 XX
 PS Claim 3; Page 88; 95pp; English.
 XX
 CC The present invention describes an immunomodulatory polynucleotide (I)
 CC comprising an immunostimulatory sequence (ISS). Also described: (1) an
 CC immunomodulatory composition comprising (1); (2) an immunomodulatory
 CC polynucleotide/microcarrier (IMP/MC) complex, comprising (1) linked to a
 CC biodegradable MC, where the MC is less than 10 micrometre in size; and
 CC (3) a kit comprising (1). (1) has anti-allergic, antiasthmatic, virucide,
 CC antibacterial and protozoacide activities, and can be used as a modulator
 CC of immune response. (1) is useful for modulating an immune response in an
 CC individual suffering from disorders associated with a Th2-type immune
 CC response, especially an allergy or asthma, or an infectious disease. (I)
 CC is also useful for increasing interferon-gamma (IFN-gamma) in an
 CC individual having idiopathic pulmonary fibrosis, or IFN-alpha in an
 CC individual having a viral infection. (I) is further useful for
 CC ameliorating a symptom of an infectious disease caused by a cellular
 CC pathogen such as mycobacterial disease, malaria, leishmaniasis,
 CC toxoplasmosis, schistosomiasis and clonorchiasis in an individual, or a
 CC symptom of an immunoglobulin E (IGE)-related disorder, preferably an
 CC allergy-related disorder, in particular asthma in an individual. The
 CC present sequence represents an immunomodulatory oligonucleotide which is

```
XX
SQ Sequence 10 BP; 2 A; 3 C; 3 G; 2 T; 0 U; 0 Other;
Query Match 68.0%; Score 6.8; DB 6; Length 10;
Best Local Similarity 66.7%; Pred. No. 2e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
QY 2 DANCCKTCG 10
Db 9 GAACGTCG 1
RESULT 5
ABQ75141
ID ABQ75141 standard; DNA; 10 BP.
XX
AC ABQ75141;
XX
DT 05-NOV-2002 (first entry)
XX
DE ISS immunomodulatory oligonucleotide SEQ ID NO:70.
XX
KW Immunostimulatory sequence; ISS: immunomodulatory; immune response;
KW allergy; asthma; infectious disease; interferon-gamma; IFN-gamma;
KW idiopathic pulmonary fibrosis; viral infection; mycobacterial disease;
KW malaria; leishmaniasis; toxoplasmosis; schistosomiasis; clonorchiasis;
KW immunoglobulin E; IgE-related disorder; antiallergic; antiasthmatic;
KW virucide; antibacterial; protozoacide; ss.
XX
OS Synthetic.
XX
PN WO200252002-A2.
XX
PD 04-JUL-2002.
XX
PF 27-DEC-2001; 2001WO-US050821.
XX
PR 27-DEC-2000; 2000US-0258675P.
XX
PA (DYNA-) DYNAXX TECHNOLOGIES CORP.
XX
PI Fearon KL, Dina D;
XX
WPI; 2002-657426/70.
XX
PT Immunomodulatory polynucleotide for modulating an immune response in a
PT subject suffering from disorders associated with Th2-type immune
PT response, e.g. allergy, or infectious disease, comprises an
PT immunostimulatory sequence.
XX
PS Claim 2; Page 88; 95pp; English.
XX
CC The present invention describes an immunomodulatory polynucleotide (I)
CC comprising an immunostimulatory sequence (ISS). Also described: (1) an
CC immunomodulatory composition comprising (I); (2) an immunomodulatory
CC polynucleotide/microcarrier (IMP/MC) complex, comprising (I) linked to a
CC biodegradable MC, where the MC is less than 10 micrometre in size; and
CC (3) a kit comprising (I). (I) has antiallergic, antiasthmatic, virucide,
CC antibacterial and protozoacide activities, and can be used as a modulator
CC of immune response. (I) is useful for modulating an immune response in an
CC individual suffering from disorders associated with a Th2-type immune
CC response, especially an allergy or asthma, or an infectious disease. (I)
CC is also useful for increasing interferon-gamma (IFN-gamma) in an
CC individual having idiopathic pulmonary fibrosis, or IFN-alpha in an
CC individual having a viral infection. (I) is further useful for
CC ameliorating a symptom of an infectious disease caused by a cellular
CC pathogen such as mycobacterial disease, malaria, leishmaniasis,
CC toxoplasmosis, schistosomiasis and clonorchiasis in an individual, or a
CC symptom of an immunoglobulin E (IgE)-related disorder, preferably an
CC allergy-related disorder, in particular asthma in an individual. The
CC present sequence represents an immunomodulatory oligonucleotide which is
CC specifically claimed in the present invention
XX
SQ Sequence 10 BP; 2 A; 3 C; 3 G; 2 T; 0 U; 0 Other;
Query Match 68.0%; Score 6.8; DB 6; Length 10;
Best Local Similarity 66.7%; Pred. No. 2e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
QY 2 DANCCKTCG 10
Db 9 GAACGTCG 1
RESULT 6
ABQ75135
ID ABQ75135 standard; DNA; 10 BP.
XX
AC ABQ75135;
XX
DT 05-NOV-2002 (first entry)
XX
DE ISS immunomodulatory oligonucleotide SEQ ID NO:75.
XX
KW Immunostimulatory sequence; ISS: immunomodulatory; immune response;
KW allergy; asthma; infectious disease; interferon-gamma; IFN-gamma;
KW idiopathic pulmonary fibrosis; viral infection; mycobacterial disease;
KW malaria; leishmaniasis; toxoplasmosis; schistosomiasis; clonorchiasis;
KW immunoglobulin E; IgE-related disorder; antiallergic; antiasthmatic;
KW virucide; antibacterial; protozoacide; ss.
XX
OS Synthetic.
XX
PN WO200252002-A2.
XX
PD 04-JUL-2002.
XX
PF 27-DEC-2001; 2001WO-US050821.
XX
PR 27-DEC-2000; 2000US-0258675P.
XX
PA (DYNA-) DYNAXX TECHNOLOGIES CORP.
XX
PI Fearon KL, Dina D;
XX
WPI; 2002-657426/70.
XX
PT Immunomodulatory polynucleotide for modulating an immune response in a
PT subject suffering from disorders associated with Th2-type immune
PT response, e.g. allergy, or infectious disease, comprises an
PT immunostimulatory sequence.
XX
PS Claim 3; Page 98; 95pp; English.
XX
CC The present invention describes an immunomodulatory polynucleotide (I)
CC comprising an immunostimulatory sequence (ISS). Also described: (1) an
CC immunomodulatory composition comprising (I); (2) an immunomodulatory
CC polynucleotide/microcarrier (IMP/MC) complex, comprising (I) linked to a
CC biodegradable MC, where the MC is less than 10 micrometre in size; and
CC (3) a kit comprising (I). (I) has antiallergic, antiasthmatic, virucide,
CC antibacterial and protozoacide activities, and can be used as a modulator
CC of immune response. (I) is useful for modulating an immune response in an
CC individual suffering from disorders associated with a Th2-type immune
CC response, especially an allergy or asthma, or an infectious disease. (I)
CC is also useful for increasing interferon-gamma (IFN-gamma) in an
CC individual having idiopathic pulmonary fibrosis, or IFN-alpha in an
CC individual having a viral infection. (I) is further useful for
CC ameliorating a symptom of an infectious disease caused by a cellular
CC pathogen such as mycobacterial disease, malaria, leishmaniasis,
CC toxoplasmosis, schistosomiasis and clonorchiasis in an individual, or a
CC symptom of an immunoglobulin E (IgE)-related disorder, preferably an
CC allergy-related disorder, in particular asthma in an individual. The
CC present sequence represents an immunomodulatory oligonucleotide which is
CC specifically claimed in the present invention
XX
SQ Sequence 10 BP; 2 A; 3 C; 3 G; 2 T; 0 U; 0 Other;
```

Query Match 68.0%; Score 6.8; DB 6; Length 10;
 Best Local Similarity 66.7%; Pred. No. 2e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANGKTCG 10
 :|||:|
 Db 2 AACGTTTCG 10

RESULT 7

ABQ75144

ID ABQ75144 standard; DNA; 10 BP.

XX

AC ABQ75144;

XX

DT 05-NOV-2002 (first entry)

XX

DE ISS immunomodulatory oligonucleotide SEQ ID NO:73.

XX

Immunostimulatory sequence; ISS: immunomodulatory; immune response;
 allergy; asthma; infectious disease; interferon-gamma; IFN-gamma;
 idiopathic pulmonary fibrosis; viral infection; mycobacterial disease;
 malaria; leishmaniasis; toxoplasmosis; schistosomiasis; clonorchiasis;
 immunoglobulin E; IgE-related disorder; antiallergic; antiasthmatic;
 virucide; antibacterial; protozoacide; ss.

XX Synthetic.

XX

XX WO200252002-A2.

PN

XX

XX PD 04-JUL-2002.

XX

XX PF 27-DEC-2001; 2001WO-US050821.

XX

XX PR 27-DEC-2000; 2000US-0258675P.

XX

XX PA (DYNA-) DYNAVAX TECHNOLOGIES CORP.

XX

XX PI Fearon KL, Dina D;

XX

XX DR WPI; 2002-657426/70.

XX

Immunomodulatory polynucleotide for modulating an immune response in a
 subject suffering from disorders associated with Th2-type immune
 response, e.g. allergy, or infectious disease, comprises an
 immunostimulatory sequence.

XX

XX PS Claim 2; Page 88; 95pp; English.

XX

The present invention describes an immunomodulatory polynucleotide (I)
 comprising an immunostimulatory sequence (ISS). Also described: (1) an
 immunomodulatory composition comprising (I); (2) an immunomodulatory
 polynucleotide/microcarrier (IMP/MC) complex, comprising (I) linked to a
 biodegradable MC, where the MC is less than 10 micrometre in size; and
 (3) a kit comprising (I). (I) has antiallergic, antiasthmatic, virucide,
 antibacterial and protozoacide activities, and can be used as a modulator
 of immune response. (I) is useful for modulating an immune response in an
 individual suffering from disorders associated with a Th2-type immune
 response, especially an allergy or asthma, or an infectious disease. (I)
 is also useful for increasing interferon-gamma (IFN-gamma) in an
 individual having idiopathic pulmonary fibrosis, or IFN-alpha in an
 individual having a viral infection. (I) is further useful for
 ameliorating a symptom of an infectious disease caused by a cellular
 pathogen such as mycobacterial disease, malaria, leishmaniasis,
 toxoplasmosis, schistosomiasis and clonorchiasis in an individual, or a
 symptom of an immunoglobulin E (IgE)-related disorder, preferably an
 allergy-related disorder, in particular asthma in an individual. The
 present sequence represents an immunomodulatory oligonucleotide which is
 specifically claimed in the present invention

XX Sequence 10 BP; 1 A; 2 C; 4 G; 3 T; 0 U; 0 Other;

XX SQ

Query Match 68.0%; Score 6.8; DB 6; Length 10;
 Best Local Similarity 66.7%; Pred. No. 2e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANGKTCG 10
 :|||:|
 Db 2 TATCGGTCG 10

RESULT 8

ABQ75150

ID ABQ75150 standard; DNA; 10 BP.

XX

AC ABQ75150;

XX

DT 05-NOV-2002 (first entry)

XX

DE ISS immunomodulatory oligonucleotide SEQ ID NO:81.

XX

Immunostimulatory sequence; ISS: immunomodulatory; immune response;
 allergy; asthma; infectious disease; interferon-gamma; IFN-gamma;
 idiopathic pulmonary fibrosis; viral infection; mycobacterial disease;
 malaria; leishmaniasis; toxoplasmosis; schistosomiasis; clonorchiasis;
 immunoglobulin E; IgE-related disorder; antiallergic; antiasthmatic;
 virucide; antibacterial; protozoacide; ss.

XX Synthetic.

XX

XX PH Key Location/Qualifiers

XX FT misc_RNA

XX FT /*tag= a

XX FT /note= "uracil"

XX FT misc_RNA

XX FT /*tag= b

XX FT /note= "uracil"

XX

XX WO200252002-A2.

XX

XX PD 04-JUL-2002.

XX

XX PR 27-DEC-2001; 2001WO-US050821.

XX

XX PF 27-DEC-2000; 2000US-0258675P.

XX

XX PA (DYNA-) DYNAVAX TECHNOLOGIES CORP.

XX

XX PI Fearon KL, Dina D;

XX

XX DR WPI; 2002-657426/70.

XX

Immunomodulatory polynucleotide for modulating an immune response in a
 subject suffering from disorders associated with Th2-type immune
 response, e.g. allergy, or infectious disease, comprises an
 immunostimulatory sequence.

XX

XX PS Claim 2; Page 88; 95pp; English.

XX

The present invention describes an immunomodulatory polynucleotide (I)
 comprising an immunostimulatory sequence (ISS). Also described: (1) an
 immunomodulatory composition comprising (I); (2) an immunomodulatory
 polynucleotide/microcarrier (IMP/MC) complex, comprising (I) linked to a
 biodegradable MC, where the MC is less than 10 micrometre in size; and
 (3) a kit comprising (I). (I) has antiallergic, antiasthmatic, virucide,
 antibacterial and protozoacide activities, and can be used as a modulator
 of immune response. (I) is useful for modulating an immune response in an
 individual suffering from disorders associated with a Th2-type immune
 response, especially an allergy or asthma, or an infectious disease. (I)
 is also useful for increasing interferon-gamma (IFN-gamma) in an
 individual having idiopathic pulmonary fibrosis, or IFN-alpha in an
 individual having a viral infection. (I) is further useful for
 ameliorating a symptom of an infectious disease caused by a cellular
 pathogen such as mycobacterial disease, malaria, leishmaniasis,
 toxoplasmosis, schistosomiasis and clonorchiasis in an individual, or a

CC symptom of an immunoglobulin E (IGE)-related disorder, preferably an
 CC allergy-related disorder, in particular asthma in an individual. The
 CC present sequence represents an immunomodulatory oligonucleotide which is
 CC specifically claimed in the present invention

XX Sequence 10 BP; 2 A; 2 C; 2 G; 2 T; 2 U; 0 Other;
 Query Match 68.0%; Score 6.8; DB 6; Length 10;
 Best Local Similarity 66.7%; Pred. No. 2e+05; 1; Indels 0; Gaps 0;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
 : || ||: |||
 Db 2 UAACGTCG 10
 : || ||: |||

RESULT 9
 ABQ75148
 ID ABQ75148 standard; DNA; 10 BP.
 XX
 AC ABQ75148;
 XX
 DT 05-NOV-2002 (first entry)
 XX
 DE ISS immunomodulatory oligonucleotide SEQ ID NO:79.
 XX
 KW Immunostimulatory sequence; ISS: immunomodulatory; immune response;
 KW allergy; asthma; infectious disease; interferon-gamma; IFN-gamma;
 KW idiopathic pulmonary fibrosis; viral infection; mycobacterial disease;
 KW malaria; leishmaniasis; toxoplasmosis; schistosomiasis; clonorchiasis;
 KW immunoglobulin E; IGE-related disorder; antiallergic; antiasthmatic;
 KW virucide; antibacterial; protozoacide; ss.
 XX
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT modified_base 1 /*tag= a
 FT /mod_base= OTHER
 FT /note= "5-bromocytosine"
 FT
 XX WO200252002-A2.
 XX
 PD 04-JUL-2002.
 XX
 PF 27-DEC-2001; 2001WO-US050821.
 XX
 PR 27-DEC-2000; 2000US-0258675P.
 XX
 PA (DYNA-) DYNAVAX TECHNOLOGIES CORP.
 XX
 PI Fearon KL, Dina D;
 XX WPI; 2002-657426/70.
 XX
 PT Immunomodulatory polynucleotide for modulating an immune response in a
 PT subject suffering from disorders associated with Th2-type immune
 PT response, e.g. allergy, or infectious disease, comprises an
 PT immunostimulatory sequence.
 XX
 PS Claim 2; Page 88; 95pp; English.
 XX
 CC The present invention describes an immunomodulatory polynucleotide (I)
 CC comprising an immunostimulatory sequence (ISS). Also described: (1) an
 CC immunomodulatory composition comprising (I); (2) an immunomodulatory
 CC polynucleotide/microcarrier (IMP/MC) complex, comprising (I) linked to a
 CC biodegradable MC, where the MC is less than 10 micrometre in size; and
 CC (3) a kit comprising (I). (I) has antiallergic, antiasthmatic, virucide,
 CC antibacterial and protozoacide activities, and can be used as a modulator
 CC of immune response. (I) is useful for modulating an immune response in an
 CC individual suffering from disorders associated with a Th2-type immune
 CC response, especially an allergy or asthma, or an infectious disease. (I)
 CC is also useful for increasing interferon-gamma (IFN-gamma) in an

CC individual having idiopathic pulmonary fibrosis, or IFN-alpha in an
 CC individual having a viral infection. (I) is further useful for
 CC ameliorating a symptom of an infectious disease caused by a cellular
 CC pathogen such as mycobacterial disease, malaria, leishmaniasis,
 CC toxoplasmosis, schistosomiasis and clonorchiasis in an individual, or a
 CC symptom of an immunoglobulin E (IGE)-related disorder, preferably an
 CC allergy-related disorder, in particular asthma in an individual. The
 CC present sequence represents an immunomodulatory oligonucleotide which is
 CC specifically claimed in the present invention

XX Sequence 10 BP; 2 A; 2 C; 3 G; 2 T; 0 U; 1 Other;
 Query Match 68.0%; Score 6.8; DB 6; Length 10;
 Best Local Similarity 66.7%; Pred. No. 2e+05; 1; Indels 0; Gaps 0;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
 : || ||: |||
 Db 2 GAACGTCG 10
 : || ||: |||

RESULT 10
 ABQ75149
 ID ABQ75149 standard; DNA; 10 BP.
 XX
 AC ABQ75149;
 XX
 DT 05-NOV-2002 (first entry)
 XX
 DE ISS immunomodulatory oligonucleotide SEQ ID NO:80.
 XX
 KW Immunostimulatory sequence; ISS: immunomodulatory; immune response;
 KW allergy; asthma; infectious disease; interferon-gamma; IFN-gamma;
 KW idiopathic pulmonary fibrosis; viral infection; mycobacterial disease;
 KW malaria; leishmaniasis; toxoplasmosis; schistosomiasis; clonorchiasis;
 KW immunoglobulin E; IGE-related disorder; antiallergic; antiasthmatic;
 KW virucide; antibacterial; protozoacide; ss.
 XX
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT misc_RNA 7
 FT /*tag= a
 FT /note= "uracil"
 FT
 XX WO200252002-A2.
 XX
 PD 04-JUL-2002.
 XX
 PF 27-DEC-2001; 2001WO-US050821.
 XX
 PR 27-DEC-2000; 2000US-0258675P.
 XX
 PA (DYNA-) DYNAVAX TECHNOLOGIES CORP.
 XX
 PI Fearon KL, Dina D;
 XX WPI; 2002-657426/70.
 XX
 PT Immunomodulatory polynucleotide for modulating an immune response in a
 PT subject suffering from disorders associated with Th2-type immune
 PT response, e.g. allergy, or infectious disease, comprises an
 PT immunostimulatory sequence.
 XX
 PS Claim 2; Page 88; 95pp; English.
 XX
 CC The present invention describes an immunomodulatory polynucleotide (I)
 CC comprising an immunostimulatory sequence (ISS). Also described: (1) an
 CC immunomodulatory composition comprising (I); (2) an immunomodulatory
 CC polynucleotide/microcarrier (IMP/MC) complex, comprising (I) linked to a
 CC biodegradable MC, where the MC is less than 10 micrometre in size; and
 CC (3) a kit comprising (I). (I) has antiallergic, antiasthmatic, virucide,
 CC antibacterial and protozoacide activities, and can be used as a modulator

CC of immune response. (1) is useful for modulating an immune response in an
 CC individual suffering from disorders associated with a Th2-type immune
 CC response, especially an allergy or asthma, or an infectious disease. (1)
 CC is also useful for increasing interferon-gamma (IFN-gamma) in an
 CC individual having idiopathic pulmonary fibrosis, or IFN-alpha in an
 CC individual having a viral infection. (1) is further useful for
 CC ameliorating a symptom of an infectious disease caused by a cellular
 CC pathogen such as mycobacterial disease, malaria, leishmaniasis,
 CC toxoplasmosis, schistosomiasis and clonorchiasis in an individual, or a
 CC symptom of an immunoglobulin E (IgE)-related disorder, preferably an
 CC allergy-related disorder, in particular asthma in an individual. The
 CC present sequence represents an immunomodulatory oligonucleotide which is
 CC specifically claimed in the present invention

XX Sequence 10 BP; 2 A; 2 C; 2 G; 3 T; 1 U; 0 Other;

Query Match 68.0%; Score 6.8; DB 6; Length 10;
 Best Local Similarity 66.7%; Pred. No. 2e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGRCTG 10
 : |||:
 Db 2 TAACGUTCG 10

RESULT 11

ABQ75134
 ID ABQ75134 standard; DNA; 10 BP.

AC ABQ75134;

XX 05-NOV-2002 (first entry)

DE ISS immunomodulatory oligonucleotide SEQ ID NO:67.

XX Immunostimulatory sequence; ISS: immunomodulatory; immune response;
 KW allergy; asthma; infectious disease; interferon-gamma; IFN-gamma;
 KW idiopathic pulmonary fibrosis; viral infection; mycobacterial disease;
 KW malaria; leishmaniasis; toxoplasmosis; schistosomiasis; clonorchiasis;
 KW immunoglobulin E; IgE-related disorder; antiallergic; antiasthmatic;
 KW virucide; antibacterial; protozoacide; ss.

XX Synthetic.

XX Key Location/Qualifiers
 FT misc_RNA 7 /*tag= a
 FT /note= "uracil"

XX WO200252002-A2.

XX 04-JUL-2002.

XX 27-DEC-2001; 2001WO-US050821.

XX 27-DEC-2000; 2000US-0258675P.

XX (DYNA-) DYNAVAX TECHNOLOGIES CORP.

XX Fearon KL, Dina D;

XX WPI; 2002-657426/70.

XX Immunomodulatory polynucleotide for modulating an immune response in a
 PT subject suffering from disorders associated with Th2-type immune
 PT response, e.g. allergy, or infectious disease, comprises an
 PT immunostimulatory sequence.

PS Claim 3; Page 88; 95pp; English.

XX The present invention describes an immunomodulatory polynucleotide (1)
 CC comprising an immunostimulatory sequence (ISS). Also described: (1) an
 CC immunomodulatory composition comprising (1); (2) an immunomodulatory

CC polynucleotide/microcarrier (IMP/MC) complex, comprising (1) linked to a
 CC biodegradable MC, where the MC is less than 10 micrometre in size; and
 CC (3) a kit comprising (1). (1) has antiallergic, antiasthmatic, virucide,
 CC antibacterial and protozoacide activities, and can be used as a modulator
 CC of immune response. (1) is useful for modulating an immune response in an
 CC individual suffering from disorders associated with a Th2-type immune
 CC response, especially an allergy or asthma, or an infectious disease. (1)
 CC is also useful for increasing interferon-gamma (IFN-gamma) in an
 CC individual having idiopathic pulmonary fibrosis, or IFN-alpha in an
 CC individual having a viral infection. (1) is further useful for
 CC ameliorating a symptom of an infectious disease caused by a cellular
 CC pathogen such as mycobacterial disease, malaria, leishmaniasis,
 CC toxoplasmosis, schistosomiasis and clonorchiasis in an individual, or a
 CC symptom of an immunoglobulin E (IgE)-related disorder, preferably an
 CC allergy-related disorder, in particular asthma in an individual. The
 CC present sequence represents an immunomodulatory oligonucleotide which is
 CC specifically claimed in the present invention

XX Sequence 10 BP; 2 A; 2 C; 3 G; 2 T; 1 U; 0 Other;

Query Match 68.0%; Score 6.8; DB 6; Length 10;
 Best Local Similarity 66.7%; Pred. No. 2e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGRCTG 10
 : |||:
 Db 2 GAACGUTCG 10

RESULT 12

ABQ75143

ID ABQ75143 standard; DNA; 10 BP.

AC ABQ75143;

XX 05-NOV-2002 (first entry)

DE ISS immunomodulatory oligonucleotide SEQ ID NO:72.

XX Immunostimulatory sequence; ISS: immunomodulatory; immune response;
 KW allergy; asthma; infectious disease; interferon-gamma; IFN-gamma;
 KW idiopathic pulmonary fibrosis; viral infection; mycobacterial disease;
 KW malaria; leishmaniasis; toxoplasmosis; schistosomiasis; clonorchiasis;
 KW immunoglobulin E; IgE-related disorder; antiallergic; antiasthmatic;
 KW virucide; antibacterial; protozoacide; ss.

XX Synthetic.

XX WO200252002-A2.

XX 04-JUL-2002.

XX 27-DEC-2001; 2001WO-US050821.

XX 27-DEC-2000; 2000US-0258675P.

XX (DYNA-) DYNAVAX TECHNOLOGIES CORP.

XX Fearon KL, Dina D;

XX WPI; 2002-657426/70.

XX Immunomodulatory polynucleotide for modulating an immune response in a
 PT subject suffering from disorders associated with Th2-type immune
 PT response, e.g. allergy, or infectious disease, comprises an
 PT immunostimulatory sequence.

PS Claim 2; Page 88; 95pp; English.

XX The present invention describes an immunomodulatory polynucleotide (1)
 CC comprising an immunostimulatory sequence (ISS). Also described: (1) an
 CC immunomodulatory composition comprising (1); (2) an immunomodulatory
 CC polynucleotide/microcarrier (IMP/MC) complex, comprising (1) linked to a

CC biodegradable MC, where the MC is less than 10 micrometre in size; and
 CC (3) a kit comprising (I). (I) has anti-allergic, antiasthmatic, virucide,
 CC antibacterial and protozoacide activities, and can be used as a modulator
 CC of immune response. (I) is useful for modulating an immune response in an
 CC individual suffering from disorders associated with a Th2-type immune
 CC response, especially an allergy or asthma, or an infectious disease. (I)
 CC is also useful for increasing interferon-gamma (IFN-gamma) in an
 CC individual having idiopathic pulmonary fibrosis, or IFN-alpha in an
 CC individual having a viral infection. (I) is further useful for
 CC ameliorating a symptom of an infectious disease caused by a cellular
 CC pathogen such as mycobacterial disease, malaria, leishmaniasis,
 CC toxoplasmosis, schistosomiasis and clonorchiasis in an individual, or a
 CC symptom of an immunoglobulin E (IGE)-related disorder, preferably an
 CC allergy-related disorder, in particular asthma in an individual. The
 CC present sequence represents an immunomodulatory oligonucleotide which is
 CC specifically claimed in the present invention

XX SQ Sequence 10 BP; 2 A; 2 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 68.0%; Score 6.8; DB 6; Length 10;
 Best Local Similarity 66.7%; Pred. No. 2e+05; 1; Indels 0; Gaps 0;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
 : |||||
 Db 2 TAACGGTTCG 10

RESULT 13
 ABQ75202
 ID ABQ75202 standard; DNA; 10 BP.

AC ABQ75202;

XX 05-NOV-2002 (first entry)

DE ISS immunomodulatory oligonucleotide SEQ ID NO:133.

XX Immunostimulatory sequence; ISS: immunomodulatory; immune response;
 KW allergy; asthma; infectious disease; interferon-gamma; IFN-gamma;
 KW idiopathic pulmonary fibrosis; viral infection; mycobacterial disease;
 KW malaria; leishmaniasis; toxoplasmosis; schistosomiasis; clonorchiasis;
 KW immunoglobulin E; IGE-related disorder; anti-allergic; antiasthmatic;
 KW virucide; antibacterial; protozoacide; ss.

XX Synthetic.

XX Key Location/Qualifiers

FT modified_base 1 /*tag= a
 FT /mod_base= OTHER
 FT /note= "T, C or 5-bromocytosine"

XX WO200252002-A2.

XX 04-JUL-2002.

XX 27-DEC-2001; 2001WO-US050821.

XX 27-DEC-2000; 2000US-0258675P.

XX (DYNA-) DYNAVAX TECHNOLOGIES CORP.

XX Fearon KL, Dina D;

XX WPI; 2002-657426/70.

XX Immunomodulatory polynucleotide for modulating an immune response in a
 PT subject suffering from disorders associated with Th2-type immune
 PT response, e.g. allergy, or infectious disease, comprises an
 PT immunostimulatory sequence.

XX Disclosure; Page 21; 95pp; English.

XX The present invention describes an immunomodulatory polynucleotide (I)
 CC comprising an immunostimulatory sequence (ISS). Also described: (1) an
 CC immunomodulatory composition comprising (I); (2) an immunomodulatory
 CC polynucleotide/microcarrier (IMP/MC) complex, comprising (I) linked to a
 CC biodegradable MC, where the MC is less than 10 micrometre in size; and
 CC (3) a kit comprising (I). (I) has anti-allergic, antiasthmatic, virucide,
 CC antibacterial and protozoacide activities, and can be used as a modulator
 CC of immune response. (I) is useful for modulating an immune response in an
 CC individual suffering from disorders associated with a Th2-type immune
 CC response, especially an allergy or asthma, or an infectious disease. (I)
 CC is also useful for increasing interferon-gamma (IFN-gamma) in an
 CC individual having idiopathic pulmonary fibrosis, or IFN-alpha in an
 CC individual having a viral infection. (I) is further useful for
 CC ameliorating a symptom of an infectious disease caused by a cellular
 CC pathogen such as mycobacterial disease, malaria, leishmaniasis,
 CC toxoplasmosis, schistosomiasis and clonorchiasis in an individual, or a
 CC symptom of an immunoglobulin E (IGE)-related disorder, preferably an
 CC allergy-related disorder, in particular asthma in an individual. The
 CC present sequence represents an immunomodulatory oligonucleotide from the
 CC present invention

XX SQ Sequence 10 BP; 1 A; 2 C; 2 G; 1 T; 0 U; 4 Other;

Query Match 68.0%; Score 6.8; DB 6; Length 10;
 Best Local Similarity 88.9%; Pred. No. 2e+05; 1; Indels 0; Gaps 0;
 Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
 : |||||
 Db 2 DAHCCKTCG 10

RESULT 14

ABQ75142
 ID ABQ75142 standard; DNA; 10 BP.

AC ABQ75142;

XX 05-NOV-2002 (first entry)

XX ISS immunomodulatory oligonucleotide SEQ ID NO:71.

XX Immunostimulatory sequence; ISS: immunomodulatory; immune response;
 KW allergy; asthma; infectious disease; interferon-gamma; IFN-gamma;
 KW idiopathic pulmonary fibrosis; viral infection; mycobacterial disease;
 KW malaria; leishmaniasis; toxoplasmosis; schistosomiasis; clonorchiasis;
 KW immunoglobulin E; IGE-related disorder; anti-allergic; antiasthmatic;
 KW virucide; antibacterial; protozoacide; ss.

XX Synthetic.

XX WO200252002-A2.

XX 04-JUL-2002.

XX 27-DEC-2001; 2001WO-US050821.

XX 27-DEC-2000; 2000US-0258675P.

XX (DYNA-) DYNAVAX TECHNOLOGIES CORP.

XX Fearon KL, Dina D;

XX WPI; 2002-657426/70.

XX Immunomodulatory polynucleotide for modulating an immune response in a
 PT subject suffering from disorders associated with Th2-type immune
 PT response, e.g. allergy, or infectious disease, comprises an
 PT immunostimulatory sequence.

XX Claim 2; Page 88; 95pp; English.

CC The present invention describes an immunomodulatory polynucleotide (I) comprising an immunostimulatory sequence (ISS). Also described: (1) an immunomodulatory composition comprising (I); (2) an immunomodulatory polynucleotide/microcarrier (IMP/MC) complex, comprising (I) linked to a biodegradable MC, where the MC is less than 10 micrometre in size; and (3) a kit comprising (I). (I) has anti-allergic, antiasthmatic, virucide, antibacterial and protozoacide activities, and can be used as a modulator of immune response. (I) is useful for modulating an immune response in an individual suffering from disorders associated with a Th2-type immune response, especially an allergy or asthma, or an infectious disease. (I) is also useful for increasing interferon-gamma (IFN-gamma) in an individual having idiopathic pulmonary fibrosis, or IFN-alpha in an individual having a viral infection. (I) is further useful for ameliorating a symptom of an infectious disease caused by a cellular pathogen such as mycobacterial disease, malaria, leishmaniasis, toxoplasmosis, schistosomiasis and clonorchiasis in an individual, or a symptom of an immunoglobulin E (IGE)-related disorder, preferably an allergy-related disorder, in particular asthma in an individual. The present sequence represents an immunomodulatory oligonucleotide which is specifically claimed in the present invention

XX Sequence 10 BP; 2 A; 2 C; 4 G; 2 T; 0 U; 0 Other;

Query Match 68.0%; Score 6.8; DB 6; Length 10;
 Best Local Similarity 66.7%; Pred. No. 2e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGRKTCG 10
 :|||:||||
 Db 2 GACGGTCG 10

RESULT 15
 ABQ75129
 ID ABQ75129 standard; DNA; 10 BP.
 AC ABQ75129;
 XX
 XX 05-NOV-2002 (first entry)
 XX ISS immunomodulatory oligonucleotide SEQ ID NO:62.
 XX Immunostimulatory sequence; ISS: immunomodulatory; immune response; allergy; asthma; infectious disease; interferon-gamma; IFN-gamma; idiopathic pulmonary fibrosis; viral infection; mycobacterial disease; malaria; leishmaniasis; toxoplasmosis; schistosomiasis; clonorchiasis; immunoglobulin E; IGE-related disorder; anti-allergic; antiasthmatic; virucide; antibacterial; protozoacide; ss.
 XX Synthetic.
 FT Key Location/Qualifiers
 FT modified_base 1 /*tag= a
 FT /mod_base= OTHER
 FT /note= "T, G, C or 5-bromocytosine"
 XX
 XX WO200252002-A2.
 XX
 XX 04-JUL-2002.
 XX
 XX 27-DEC-2001; 2001WO-US050821.
 XX
 XX 27-DEC-2000; 2000US-0258675P.
 XX
 XX (DYNA-) DYNAXVAX TECHNOLOGIES CORP.
 XX Fearon KL, Dina D;
 XX WPI; 2002-657426/70.
 XX Immunomodulatory polynucleotide for modulating an immune response in a subject suffering from disorders associated with Th2-type immune

PT response, e.g. allergy, or infectious disease, comprises an immunostimulatory sequence.

XX Claim 1; Page 88; 95pp; English.

XX The present invention describes an immunomodulatory polynucleotide (I) comprising an immunostimulatory sequence (ISS). Also described: (1) an immunomodulatory composition comprising (I); (2) an immunomodulatory polynucleotide/microcarrier (IMP/MC) complex, comprising (I) linked to a biodegradable MC, where the MC is less than 10 micrometre in size; and (3) a kit comprising (I). (I) has anti-allergic, antiasthmatic, virucide, antibacterial and protozoacide activities, and can be used as a modulator of immune response. (I) is useful for modulating an immune response in an individual suffering from disorders associated with a Th2-type immune response, especially an allergy or asthma, or an infectious disease. (I) is also useful for increasing interferon-gamma (IFN-gamma) in an individual having idiopathic pulmonary fibrosis, or IFN-alpha in an individual having a viral infection. (I) is further useful for ameliorating a symptom of an infectious disease caused by a cellular pathogen such as mycobacterial disease, malaria, leishmaniasis, toxoplasmosis, schistosomiasis and clonorchiasis in an individual, or a symptom of an immunoglobulin E (IGE)-related disorder, preferably an allergy-related disorder, in particular asthma in an individual. The present sequence represents an immunomodulatory oligonucleotide from the present invention

XX Sequence 10 BP; 1 A; 2 C; 2 G; 1 T; 0 U; 4 Other;

Query Match 68.0%; Score 6.8; DB 6; Length 10;
 Best Local Similarity 88.9%; Pred. No. 2e+05;
 Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGRKTCG 10
 :|||:||||
 Db 2 DAHCGRKTCG 10

RESULT 16
 ABQ75140
 ID ABQ75140 standard; DNA; 10 BP.
 XX ABQ75140;
 XX
 XX 05-NOV-2002 (first entry)
 XX ISS immunomodulatory oligonucleotide SEQ ID NO:69.
 XX Immunostimulatory sequence; ISS: immunomodulatory; immune response; allergy; asthma; infectious disease; interferon-gamma; IFN-gamma; idiopathic pulmonary fibrosis; viral infection; mycobacterial disease; malaria; leishmaniasis; toxoplasmosis; schistosomiasis; clonorchiasis; immunoglobulin E; IGE-related disorder; anti-allergic; antiasthmatic; virucide; antibacterial; protozoacide; ss.
 XX Synthetic.
 XX WO200252002-A2.
 XX
 XX 04-JUL-2002.
 XX
 XX 27-DEC-2001; 2001WO-US050821.
 XX
 XX 27-DEC-2000; 2000US-0258675P.
 XX
 XX (DYNA-) DYNAXVAX TECHNOLOGIES CORP.
 XX Fearon KL, Dina D;
 XX WPI; 2002-657426/70.
 XX Immunomodulatory polynucleotide for modulating an immune response in a subject suffering from disorders associated with Th2-type immune response, e.g. allergy, or infectious disease, comprises an

PT immunostimulatory sequence.

XX Claim 2; Page 88; 95pp; English.

XX The present invention describes an immunomodulatory polynucleotide (I) comprising an immunostimulatory sequence (ISS). Also described: (1) an immunomodulatory composition comprising (I); (2) an immunomodulatory polynucleotide/microcarrier (IMP/MC) complex, comprising (I) linked to a biodegradable MC, where the MC is less than 10 micrometre in size; and (3) a kit comprising (I). (I) has anti-allergic, antiasthmatic, virucide, antibacterial and protozoacide activities, and can be used as a modulator of immune response. (I) is useful for modulating an immune response in an individual suffering from disorders associated with a Th2-type immune response, especially an allergy or asthma, or an infectious disease. (I) is also useful for increasing interferon-gamma (IFN-gamma) in an individual having idiopathic pulmonary fibrosis, or IFN-alpha in an individual having a viral infection. (I) is further useful for ameliorating a symptom of an infectious disease caused by a cellular pathogen such as mycobacterial disease, malaria, leishmaniasis, toxoplasmosis, schistosomiasis and clonorchiasis in an individual, or a symptom of an immunoglobulin E (IgE)-related disorder, preferably an allergy-related disorder, in particular asthma in an individual. The present sequence represents an immunomodulatory oligonucleotide which is specifically claimed in the present invention

XX Sequence 10 BP; 1 A; 2 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 68.0%; Score 6.8; DB 6; Length 10;
Best Local Similarity 66.7%; Pred. No. 2e+05;

Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10

Db 2 GATCGGTCG 10

RESULT 17

ABQ75131

ID ABQ75131 standard; DNA; 10 BP.

AC ABQ75131;

DT 05-NOV-2002 (first entry)

DE ISS immunomodulatory oligonucleotide SEQ ID NO:64.

XX Immunostimulatory sequence; ISS: immunomodulatory; immune response;
KW allergy; asthma; infectious disease; interferon-gamma; IFN-gamma;
KW idiopathic pulmonary fibrosis; viral infection; mycobacterial disease;
KW malaria; leishmaniasis; toxoplasmosis; schistosomiasis; clonorchiasis;
KW immunoglobulin E; IgE-related disorder; anti-allergic; antiasthmatic;
KW virucide; antibacterial; protozoacide; ss.

XX Synthetic.

XX WO200252002-A2.

XX 04-JUL-2002.

XX 27-DEC-2001; 2001WO-US050821.

XX 27-DEC-2000; 2000US-0258675P.

XX (DYNA-) DYNAX TECHNOLOGIES CORP.

XX Fearon KL, Dina D;

XX WPI; 2002-657426/70.

XX Immunomodulatory polynucleotide for modulating an immune response in a
PT subject suffering from disorders associated with Th2-type immune
PT response, e.g. allergy, or infectious disease, comprises an
PT immunostimulatory sequence.

XX

PS Disclosure; Page 5; 95pp; English.

XX The present invention describes an immunomodulatory polynucleotide (I) comprising an immunostimulatory sequence (ISS). Also described: (1) an immunomodulatory composition comprising (I); (2) an immunomodulatory polynucleotide/microcarrier (IMP/MC) complex, comprising (I) linked to a biodegradable MC, where the MC is less than 10 micrometre in size; and (3) a kit comprising (I). (I) has anti-allergic, antiasthmatic, virucide, antibacterial and protozoacide activities, and can be used as a modulator of immune response. (I) is useful for modulating an immune response in an individual suffering from disorders associated with a Th2-type immune response, especially an allergy or asthma, or an infectious disease. (I) is also useful for increasing interferon-gamma (IFN-gamma) in an individual having idiopathic pulmonary fibrosis, or IFN-alpha in an individual having a viral infection. (I) is further useful for ameliorating a symptom of an infectious disease caused by a cellular pathogen such as mycobacterial disease, malaria, leishmaniasis, toxoplasmosis, schistosomiasis and clonorchiasis in an individual, or a symptom of an immunoglobulin E (IgE)-related disorder, preferably an allergy-related disorder, in particular asthma in an individual. The present sequence represents an immunomodulatory oligonucleotide which is specifically not claimed in the present invention

XX Sequence 10 BP; 2 A; 2 C; 4 G; 2 T; 0 U; 0 Other;

Query Match 68.0%; Score 6.8; DB 6; Length 10;

Best Local Similarity 66.7%; Pred. No. 2e+05;

Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10

Db 2 GAACGTTTCG 10

RESULT 18

ABQ75139

ID ABQ75139 standard; DNA; 10 BP.

AC ABQ75139;

DT 05-NOV-2002 (first entry)

DE ISS immunomodulatory oligonucleotide SEQ ID NO:68.

XX Immunostimulatory sequence; ISS: immunomodulatory; immune response;
KW allergy; asthma; infectious disease; interferon-gamma; IFN-gamma;
KW idiopathic pulmonary fibrosis; viral infection; mycobacterial disease;
KW malaria; leishmaniasis; toxoplasmosis; schistosomiasis; clonorchiasis;
KW immunoglobulin E; IgE-related disorder; anti-allergic; antiasthmatic;
KW virucide; antibacterial; protozoacide; ss.

XX Synthetic.

XX WO200252002-A2.

XX 04-JUL-2002.

XX 27-DEC-2001; 2001WO-US050821.

XX 27-DEC-2000; 2000US-0258675P.

XX (DYNA-) DYNAX TECHNOLOGIES CORP.

XX Fearon KL, Dina D;

XX WPI; 2002-657426/70.

XX Immunomodulatory polynucleotide for modulating an immune response in a
PT subject suffering from disorders associated with Th2-type immune
PT response, e.g. allergy, or infectious disease, comprises an
PT immunostimulatory sequence.

PS Claim 2; Page 88; 95pp; English.

XX The present invention describes an immunomodulatory polynucleotide (I) comprising an immunostimulatory sequence (ISS). Also described: (1) an immunomodulatory composition comprising (I); (2) an immunomodulatory polynucleotide/microcarrier (IMP/MC) complex, comprising (I) linked to a biodegradable MC, where the MC is less than 10 micrometre in size; and (3) a kit comprising (I). (I) has anti-allergic, antiasthmatic, virucide, antibacterial and protozoacide activities, and can be used as a modulator of immune response. (I) is useful for modulating an immune response in an individual suffering from disorders associated with a Th2-type immune response, especially an allergy or asthma, or an infectious disease. (I) is also useful for increasing interferon-gamma (IFN-gamma) in an individual having idiopathic pulmonary fibrosis, or IFN-alpha in an individual having a viral infection. (I) is further useful for ameliorating a symptom of an infectious disease caused by a cellular pathogen such as mycobacterial disease, malaria, leishmaniasis, toxoplasmosis, schistosomiasis and clonorchiasis in an individual, or a symptom of an immunoglobulin E (IgE)-related disorder, preferably an allergy-related disorder, in particular asthma in an individual. The present sequence represents an immunomodulatory oligonucleotide which is specifically claimed in the present invention

XX Sequence 10 BP; 1 A; 3 C; 3 G; 3 T; 0 U; 0 Other;

SQ Query Match 68.0%; Score 6.8; DB 6; Length 10;
Best Local Similarity 66.7%; Pred. No. 2e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANGKTCG 10
Db : |||||
2 GACCGTCG 10

RESULT 19

ABQ75145

ID ABQ75145 standard; DNA; 10 BP.

XX

AC ABQ75145;

XX

DT 05-NOV-2002 (first entry)

XX

DE ISS immunomodulatory oligonucleotide SEQ ID NO:74.

XX

KW Immunostimulatory sequence; ISS: immunomodulatory; immune response;
allergy; asthma; infectious disease; interferon-gamma; IFN-gamma;
idiopathic pulmonary fibrosis; viral infection; mycobacterial disease;
malaria; leishmaniasis; toxoplasmosis; schistosomiasis; clonorchiasis;
immunoglobulin E; IgE-related disorder; antiallergic; antiasthmatic;
virucide; antibacterial; protozoacide; ss.

XX Synthetic.

OS

XX WO200252002-A2.

FN

XX 04-JUL-2002.

XX

XX 27-DEC-2001; 2001WO-US050821.

XX

XX 27-DEC-2000; 2000US-0258675P.

XX

XX (DYNA-) DYNAVAX TECHNOLOGIES CORP.

XX

XX Fearon KL, Dina D;

XX

XX WPI; 2002-657426/70.

XX

XX Immunomodulatory polynucleotide for modulating an immune response in a subject suffering from disorders associated with Th2-type immune response, e.g. allergy, or infectious disease, comprises an immunostimulatory sequence.

XX

PS Claim 2; Page 88; 95pp; English.

XX The present invention describes an immunomodulatory polynucleotide (I) comprising an immunostimulatory sequence (ISS). Also described: (1) an immunomodulatory composition comprising (I); (2) an immunomodulatory polynucleotide/microcarrier (IMP/MC) complex, comprising (I) linked to a biodegradable MC, where the MC is less than 10 micrometre in size; and (3) a kit comprising (I). (I) has anti-allergic, antiasthmatic, virucide, antibacterial and protozoacide activities, and can be used as a modulator of immune response. (I) is useful for modulating an immune response in an individual suffering from disorders associated with a Th2-type immune response, especially an allergy or asthma, or an infectious disease. (I) is also useful for increasing interferon-gamma (IFN-gamma) in an individual having idiopathic pulmonary fibrosis, or IFN-alpha in an individual having a viral infection. (I) is further useful for ameliorating a symptom of an infectious disease caused by a cellular pathogen such as mycobacterial disease, malaria, leishmaniasis, toxoplasmosis, schistosomiasis and clonorchiasis in an individual, or a symptom of an immunoglobulin E (IgE)-related disorder, preferably an allergy-related disorder, in particular asthma in an individual. The present sequence represents an immunomodulatory oligonucleotide which is specifically claimed in the present invention

XX Sequence 10 BP; 1 A; 3 C; 3 G; 3 T; 0 U; 0 Other;

SQ Query Match 68.0%; Score 6.8; DB 6; Length 10;
Best Local Similarity 66.7%; Pred. No. 2e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANGKTCG 10
Db : |||||
2 TACCGTCG 10

RESULT 20

ABQ75146

ID ABQ75146 standard; DNA; 10 BP.

XX

AC ABQ75146;

XX

DT 05-NOV-2002 (first entry)

XX

DE ISS immunomodulatory oligonucleotide SEQ ID NO:76.

XX

KW Immunostimulatory sequence; ISS: immunomodulatory; immune response;
allergy; asthma; infectious disease; interferon-gamma; IFN-gamma;
idiopathic pulmonary fibrosis; viral infection; mycobacterial disease;
malaria; leishmaniasis; toxoplasmosis; schistosomiasis; clonorchiasis;
immunoglobulin E; IgE-related disorder; antiallergic; antiasthmatic;
virucide; antibacterial; protozoacide; ss.

XX Synthetic.

OS

XX Key modified_base 1 Location/Qualifiers
FT /*tag= a
FT /mod_base= OTHER
FT /note= "5-bromocytosine"

XX

XX WO200252002-A2.

FN

XX 04-JUL-2002.

XX

XX 27-DEC-2001; 2001WO-US050821.

XX

XX 27-DEC-2000; 2000US-0258675P.

XX

XX (DYNA-) DYNAVAX TECHNOLOGIES CORP.

XX

XX Fearon KL, Dina D;

XX

XX WPI; 2002-657426/70.

XX

XX Immunomodulatory polynucleotide for modulating an immune response in a

PT subject suffering from disorders associated with Th2-type immune
 PT response, e.g. allergy, or infectious disease, comprises an
 PT immunostimulatory sequence.

PS Claim 2; Page 88; 95pp; English.

XX The present invention describes an immunomodulatory polynucleotide (I)
 CC comprising an immunostimulatory sequence (ISS). Also described: (1) an
 CC immunomodulatory composition comprising (I); (2) an immunomodulatory
 CC polynucleotide/microcarrier (IMP/MC) complex, comprising (I) linked to a
 CC biodegradable MC, where the MC is less than 10 micrometre in size; and
 CC (3) a kit comprising (I). (I) has anti-allergic, antiasthmatic, virucide,
 CC antibacterial and protozoacide activities, and can be used as a modulator
 CC of immune response. (I) is useful for modulating an immune response in an
 CC individual suffering from disorders associated with a Th2-type immune
 CC response, especially an allergy or asthma, or an infectious disease. (I)
 CC is also useful for increasing interferon-gamma (IFN-gamma) in an
 CC individual having idiopathic pulmonary fibrosis, or IFN-alpha in an
 CC individual having a viral infection. (I) is further useful for
 CC ameliorating a symptom of an infectious disease caused by a cellular
 CC pathogen such as mycobacterial disease, malaria, leishmaniasis,
 CC toxoplasmosis, schistosomiasis and clonorchiasis in an individual, or a
 CC symptom of an immunoglobulin E (IGE)-related disorder, preferably an
 CC allergy-related disorder, in particular asthma in an individual. The
 CC present sequence represents an immunomodulatory oligonucleotide which is
 CC specifically claimed in the present invention

XX Sequence 10 BP; 1 A; 3 C; 3 G; 2 T; 0 U; 1 Other;

Query Match 68.0%; Score 6.8; DB 6; Length 10;
 Best Local Similarity 66.7%; Pred. No. 2e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCTCG 10
 : ||:|
 DB 2 GACCGTTCG 10

RESULT 21

ABQ75151
 ID ABQ75151 standard; DNA; 10 BP.

XX AC ABQ75151;

XX DT 05-NOV-2002 (first entry)

XX DE ISS immunomodulatory oligonucleotide SEQ ID NO:82.

XX Immunostimulatory sequence; ISS: immunomodulatory; immune response;
 KW allergy; asthma; infectious disease; interferon-gamma; IFN-gamma;
 KW idiopathic pulmonary fibrosis; viral infection; mycobacterial disease;
 KW malaria; leishmaniasis; toxoplasmosis; schistosomiasis; clonorchiasis;
 KW immunoglobulin E; IGE-related disorder; anti-allergic; antiasthmatic;
 KW virucide; antibacterial; protozoacide; ss.

XX OS Synthetic.

XX PN WO200252002-A2.

XX PD 04-JUL-2002.

XX PF 27-DEC-2001; 2001WO-US050821.

XX PR 27-DEC-2000; 2000US-0258675P.

XX PA (DYNA-) DYNAVAX TECHNOLOGIES CORP.

XX PI Fearon KL, Dina D;

XX DR WPI; 2002-657426/70.

XX Immunomodulatory polynucleotide for modulating an immune response in a
 PT subject suffering from disorders associated with Th2-type immune
 PT response, e.g. allergy, or infectious disease, comprises an

PT response, e.g. allergy, or infectious disease, comprises an
 PT immunostimulatory sequence.

PS Claim 2; Page 88; 95pp; English.

XX The present invention describes an immunomodulatory polynucleotide (I)
 CC comprising an immunostimulatory sequence (ISS). Also described: (1) an
 CC immunomodulatory composition comprising (I); (2) an immunomodulatory
 CC polynucleotide/microcarrier (IMP/MC) complex, comprising (I) linked to a
 CC biodegradable MC, where the MC is less than 10 micrometre in size; and
 CC (3) a kit comprising (I). (I) has anti-allergic, antiasthmatic, virucide,
 CC antibacterial and protozoacide activities, and can be used as a modulator
 CC of immune response. (I) is useful for modulating an immune response in an
 CC individual suffering from disorders associated with a Th2-type immune
 CC response, especially an allergy or asthma, or an infectious disease. (I)
 CC is also useful for increasing interferon-gamma (IFN-gamma) in an
 CC individual having idiopathic pulmonary fibrosis, or IFN-alpha in an
 CC individual having a viral infection. (I) is further useful for
 CC ameliorating a symptom of an infectious disease caused by a cellular
 CC pathogen such as mycobacterial disease, malaria, leishmaniasis,
 CC toxoplasmosis, schistosomiasis and clonorchiasis in an individual, or a
 CC symptom of an immunoglobulin E (IGE)-related disorder, preferably an
 CC allergy-related disorder, in particular asthma in an individual. The
 CC present sequence represents an immunomodulatory oligonucleotide which is
 CC specifically claimed in the present invention

XX Sequence 10 BP; 2 A; 2 C; 2 G; 4 T; 0 U; 0 Other;

Query Match 68.0%; Score 6.8; DB 6; Length 10;
 Best Local Similarity 66.7%; Pred. No. 2e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCTCG 10
 : ||:|
 DB 2 TAACGTTCG 10

RESULT 22

ABQ75147
 ID ABQ75147 standard; DNA; 10 BP.

XX AC ABQ75147;

XX DT 05-NOV-2002 (first entry)

XX DE ISS immunomodulatory oligonucleotide SEQ ID NO:78.

XX Immunostimulatory sequence; ISS: immunomodulatory; immune response;
 KW allergy; asthma; infectious disease; interferon-gamma; IFN-gamma;
 KW idiopathic pulmonary fibrosis; viral infection; mycobacterial disease;
 KW malaria; leishmaniasis; toxoplasmosis; schistosomiasis; clonorchiasis;
 KW immunoglobulin E; IGE-related disorder; anti-allergic; antiasthmatic;
 KW virucide; antibacterial; protozoacide; ss.

XX OS Synthetic.

XX PN WO200252002-A2.

XX PD 04-JUL-2002.

XX PF 27-DEC-2001; 2001WO-US050821.

XX PR 27-DEC-2000; 2000US-0258675P.

XX PA (DYNA-) DYNAVAX TECHNOLOGIES CORP.

XX PI Fearon KL, Dina D;

XX DR WPI; 2002-657426/70.

XX Immunomodulatory polynucleotide for modulating an immune response in a
 PT subject suffering from disorders associated with Th2-type immune
 PT response, e.g. allergy, or infectious disease, comprises an

PT immunostimulatory sequence.
 XX
 PS Claim 2; Page 88; 95pp; English.
 XX
 CC The present invention describes an immunomodulatory polynucleotide (I) comprising an immunostimulatory sequence (ISS). Also described: (1) an immunomodulatory composition comprising (I); (2) an immunomodulatory polynucleotide/microcarrier (IMP/MC) complex, comprising (I) linked to a biodegradable MC, where the MC is less than 10 micrometre in size; and (3) a kit comprising (I). (I) has anti-allergic, antiasthmatic, virucide, antibacterial and protozoacide activities, and can be used as a modulator of immune response. (I) is useful for modulating an immune response in an individual suffering from disorders associated with a Th2-type immune response, especially an allergy or asthma, or an infectious disease. (I) is also useful for increasing interferon-gamma (IFN-gamma) in an individual having idiopathic pulmonary fibrosis, or IFN-alpha in an individual having a viral infection. (I) is further useful for ameliorating a symptom of an infectious disease caused by a cellular pathogen such as mycobacterial disease, malaria, leishmaniasis, toxoplasmosis, schistosomiasis and clonorchiasis in an individual, or a symptom of an immunoglobulin E (IgE)-related disorder, preferably an allergy-related disorder, in particular asthma in an individual. The present sequence represents an immunomodulatory oligonucleotide which is specifically claimed in the present invention
 XX
 SQ Sequence 10 BP; 1 A; 4 C; 3 G; 2 T; 0 U; 0 Other;
 Query Match 68.0%; Score 6.8; DB 6; Length 10;
 Best Local Similarity 66.7%; Pred. No. 2e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
 QY 2 DANCCTGTCG 10
 : ||:||||
 Db 2 GACCGTTCG 10
 RESULT 23
 ABQ75147/c
 ID ABQ75147 standard; DNA; 10 BP.
 XX
 AC ABQ75147;
 XX
 DT 05-NOV-2002 (first entry)
 XX
 DE ISS immunomodulatory oligonucleotide SEQ ID NO:78.
 XX
 KW Immunostimulatory sequence; ISS: immunomodulatory; immune response; allergy; asthma; infectious disease; interferon-gamma; IFN-gamma;
 KW idiopathic pulmonary fibrosis; viral infection; mycobacterial disease; malaria; leishmaniasis; toxoplasmosis; schistosomiasis; clonorchiasis;
 KW immunoglobulin E; IgE-related disorder; anti-allergic; antiasthmatic; virucide; antibacterial; protozoacide; ss.
 XX
 OS Synthetic.
 XX
 PN WO200252002-A2.
 XX
 PD 04-JUL-2002.
 XX
 PF 27-DEC-2001; 2001WO-US050821.
 XX
 PR 27-DEC-2000; 2000US-0258675P.
 XX
 PA (DYNA-) DYNAX TECHNOLOGIES CORP.
 XX
 PI Fearon KL, Dina D;
 XX
 DR WPI; 2002-657426/70.
 XX
 PT Immunomodulatory polynucleotide for modulating an immune response in a subject suffering from disorders associated with Th2-type immune response, e.g. allergy, or infectious disease, comprises an immunostimulatory sequence.

XX
 PS Claim 2; Page 88; 95pp; English.
 XX
 CC The present invention describes an immunomodulatory polynucleotide (I) comprising an immunostimulatory sequence (ISS). Also described: (1) an immunomodulatory composition comprising (I); (2) an immunomodulatory polynucleotide/microcarrier (IMP/MC) complex, comprising (I) linked to a biodegradable MC, where the MC is less than 10 micrometre in size; and (3) a kit comprising (I). (I) has anti-allergic, antiasthmatic, virucide, antibacterial and protozoacide activities, and can be used as a modulator of immune response. (I) is useful for modulating an immune response in an individual suffering from disorders associated with a Th2-type immune response, especially an allergy or asthma, or an infectious disease. (I) is also useful for increasing interferon-gamma (IFN-gamma) in an individual having idiopathic pulmonary fibrosis, or IFN-alpha in an individual having a viral infection. (I) is further useful for ameliorating a symptom of an infectious disease caused by a cellular pathogen such as mycobacterial disease, malaria, leishmaniasis, toxoplasmosis, schistosomiasis and clonorchiasis in an individual, or a symptom of an immunoglobulin E (IgE)-related disorder, preferably an allergy-related disorder, in particular asthma in an individual. The present sequence represents an immunomodulatory oligonucleotide which is specifically claimed in the present invention
 XX
 SQ Sequence 10 BP; 1 A; 4 C; 3 G; 2 T; 0 U; 0 Other;
 Query Match 68.0%; Score 6.8; DB 6; Length 10;
 Best Local Similarity 66.7%; Pred. No. 2e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
 QY 2 DANCCTGTCG 10
 : ||:||||
 Db 9 GAACGGTTCG 1
 RESULT 24
 ADB88804
 ID ADB88804 standard; DNA; 10 BP.
 XX
 AC ADB88804;
 XX
 DT 04-DEC-2003 (first entry)
 XX
 DE Chimeric immunomodulatory compound DNA sequence, SEQ ID NO 7.
 XX
 KW Chimeric immunomodulatory compound; CIC; immunomodulatory activity; spacer moiety; linear hexaethylene glycol structure; HEG; immune; Th2-type; allergy; allergy-induced asthma; infectious disease; IFN-gamma; idiopathic pulmonary fibrosis; viral infection; ameliorating; immunoglobulin E; IgE; allergy; cancer; stimulating cellular immune system cell; ss.
 XX
 OS Synthetic.
 XX
 PN WO2003000922-A2.
 XX
 PD 03-JAN-2003.
 XX
 PF 21-JUN-2002; 2002WO-US020025.
 XX
 PR 21-JUN-2001; 2001US-0299883P.
 PR 23-APR-2002; 2002US-0375253P.
 XX
 PA (DYNA-) DYNAX TECHNOLOGIES CORP.
 XX
 PI Fearon KL, Dina D, Tuck SF;
 XX
 DR WPI; 2003-210159/20.
 XX
 PT Novel chimeric immunomodulatory compound having immunomodulatory activity, useful for modulating an immune response and for treating cancer, has nucleic acid moieties and non-nucleic acid spacer moieties.

PS Disclosure; Page 32; 224pp; English.

XX The invention relates to a novel chimeric immunomodulatory compound (CIC)
 CC having immunomodulatory activity, comprising two or more nucleic acid
 CC moieties and one or more non-nucleic acid spacer moieties, where at least
 CC one non-nucleic acid spacer moiety is covalently joined to two nucleic
 CC acid moieties, where the spacer is not a polypeptide, and at least one
 CC nucleic acid moiety comprises the sequence 5'-CG-3'. The chimeric
 CC immunomodulatory compounds more specifically contain the nucleic acid
 CC spacer moieties of linear hexaethylene glycol structure (HEG) subunits.
 CC CIC's are useful for modulating an immune response in an individual,
 CC where the individual suffers from a disorder associated with a Th2-type
 CC immune response which is an allergy or allergy-induced asthma, and an
 CC infectious disease. CIC is also useful for increasing IFN-gamma; or IFN-
 CC alpha; in an individual, where the individual has idiopathic pulmonary
 CC fibrosis, or a viral infection. CIC's are useful for ameliorating a
 CC symptom of an infectious disease, or an immunoglobulin E (IgE)-related
 CC disorder in an individual, where the IgE-related disorder is allergy, or
 CC an allergy-related disorder. CIC's are also useful for treating cancer
 CC and can be used for stimulating cellular immune system cells production
 CC in an individual. This polynucleotide sequence represents a DNA sequence
 CC which is a nucleic acid moiety part of a chimeric immunomodulatory compound
 CC of the invention.

XX Sequence 10 BP; 2 A; 2 C; 3 G; 2 T; 1 U; 0 Other;

Query Match 68.0%; Score 6.8; DB 9; Length 10;

Best Local Similarity 66.7%; Pred. No. 2e+05;

Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGKTCG 10

DB 2 GAACGUTC 10

RESULT 25

ADB88818

ID ADB88818 standard; DNA; 10 BP.

AC ADB88818;

04-DEC-2003 (first entry)

Chimeric immunomodulatory compound DNA sequence, SEQ ID No 21.

Chimeric immunomodulatory compound; CIC; immunomodulatory activity;
 spacer moiety; linear hexaethylene glycol structure; HEG; immune;
 Th2-type; allergy; allergy-induced asthma; infectious disease; IFN-gamma;
 IFN-alpha; idiopathic pulmonary fibrosis; viral infection; ameliorating;
 immunoglobulin E; IgE; allergy; cancer;
 stimulating cellular immune system cell; ss.

Synthetic.

WO2003000922-A2.

03-JAN-2003.

21-JUN-2002; 2002WO-US020025.

21-JUN-2001; 2001US-0299883P.

23-APR-2002; 2002US-0375253P.

(DYNA-) DYNAX TECHNOLOGIES CORP.

Featron KL, Dina D, Tuck SF;

WPI; 2003-210159/20.

Novel chimeric immunomodulatory compound having immunomodulatory
 activity, useful for modulating an immune response and for treating
 cancer, has nucleic acid moieties and non-nucleic acid spacer moieties.

PS Disclosure; Page 33; 224pp; English.

XX The invention relates to a novel chimeric immunomodulatory compound (CIC)
 CC having immunomodulatory activity, comprising two or more nucleic acid
 CC moieties and one or more non-nucleic acid spacer moieties, where at least
 CC one non-nucleic acid spacer moiety is covalently joined to two nucleic
 CC acid moieties, where the spacer is not a polypeptide, and at least one
 CC nucleic acid moiety comprises the sequence 5'-CG-3'. The chimeric
 CC immunomodulatory compounds more specifically contain the nucleic acid
 CC spacer moieties of linear hexaethylene glycol structure (HEG) subunits.
 CC CIC's are useful for modulating an immune response in an individual,
 CC where the individual suffers from a disorder associated with a Th2-type
 CC immune response which is an allergy or allergy-induced asthma, and an
 CC infectious disease. CIC is also useful for increasing IFN-gamma; or IFN-
 CC alpha; in an individual, where the individual has idiopathic pulmonary
 CC fibrosis, or a viral infection. CIC's are useful for ameliorating a
 CC symptom of an infectious disease, or an immunoglobulin E (IgE)-related
 CC disorder in an individual, where the IgE-related disorder is allergy, or
 CC an allergy-related disorder. CIC's are also useful for treating cancer
 CC and can be used for stimulating cellular immune system cells production
 CC in an individual. This polynucleotide sequence represents a DNA sequence
 CC which is a nucleic acid moiety part of a chimeric immunomodulatory compound
 CC of the invention.

XX Sequence 10 BP; 2 A; 2 C; 2 G; 2 T; 2 U; 0 Other;

Query Match 68.0%; Score 6.8; DB 9; Length 10;

Best Local Similarity 66.7%; Pred. No. 2e+05;

Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGKTCG 10

DB 2 UAACGUTC 10

RESULT 26

ADB88815

ID ADB88815 standard; DNA; 10 BP.

AC ADB88815;

04-DEC-2003 (first entry)

Chimeric immunomodulatory compound DNA sequence, SEQ ID No 18.

Chimeric immunomodulatory compound; CIC; immunomodulatory activity;
 spacer moiety; linear hexaethylene glycol structure; HEG; immune;
 Th2-type; allergy; allergy-induced asthma; infectious disease; IFN-gamma;
 IFN-alpha; idiopathic pulmonary fibrosis; viral infection; ameliorating;
 immunoglobulin E; IgE; allergy; cancer;
 stimulating cellular immune system cell; ss.

Synthetic.

WO2003000922-A2.

03-JAN-2003.

21-JUN-2002; 2002WO-US020025.

21-JUN-2001; 2001US-0299883P.

23-APR-2002; 2002US-0375253P.

(DYNA-) DYNAX TECHNOLOGIES CORP.

Featron KL, Dina D, Tuck SF;

WPI; 2003-210159/20.

Novel chimeric immunomodulatory compound having immunomodulatory
 activity, useful for modulating an immune response and for treating
 cancer, has nucleic acid moieties and non-nucleic acid spacer moieties.

PS Disclosure; Page 33; 224pp; English.

XX The invention relates to a novel chimeric immunomodulatory compound (CIC) having immunomodulatory activity, comprising two or more nucleic acid moieties and one or more non-nucleic acid spacer moieties, where at least one non-nucleic acid spacer moiety is covalently joined to two nucleic acid moieties, where the spacer is not a polypeptide, and at least one nucleic acid moiety comprises the sequence 5'-CG-3'. The chimeric immunomodulatory compounds more specifically contain the nucleic acid spacer moieties of linear hexaethylene glycol structure (HEG) subunits. CIC's are useful for modulating an immune response in an individual, where the individual suffers from a disorder associated with a Th2-type immune response which is an allergy or allergy-induced asthma, and an infectious disease. CIC is also useful for increasing IFN-gamma, and an alpha; in an individual, where the individual has idiopathic pulmonary fibrosis, or a viral infection. CIC's are useful for ameliorating a symptom of an infectious disease, or an immunoglobulin E (IgE)-related disorder in an individual, where the IgE-related disorder is allergy, or an allergy-related disorder. CIC's are also useful for treating cancer and can be used for stimulating cellular immune system cells production in an individual. This polynucleotide sequence represents a DNA sequence which is a nucleic acid moiety part of a chimeric immunomodulatory compound of the invention.

SQ Sequence 10 BP; 1 A; 4 C; 3 G; 2 T; 0 U; 0 Other;

Query Match 68.0%; Score 6.8; DB 9; Length 10;
Best Local Similarity 66.7%; Pred. No. 2e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: |||||
DB 2 GACCGTTCG 10

RESULT 27

ADB88815/c
ID ADB88815 standard; DNA; 10 BP.

XX ADB88815;

DT 04-DEC-2003 (first entry)

DE Chimeric immunomodulatory compound DNA sequence, SEQ ID No 18.

XX Chimeric immunomodulatory compound; CIC; immunomodulatory activity;
KW spacer moiety; linear hexaethylene glycol structure; HEG; immune;
KW Th2-type; allergy; allergy-induced asthma; infectious disease; IFN-gamma;
KW IFN-alpha; idiopathic pulmonary fibrosis; viral infection; ameliorating;
KW immunoglobulin E; IgE; allergy; cancer;
KW stimulating cellular immune system cell; ss.

XX Synthetic.

XX WO2003000922-A2.

XX 03-JAN-2003.

PF 21-JUN-2002; 2002WO-US020025.

XX 21-JUN-2001; 2001US-0299883P.

PR 23-APR-2002; 2002US-0375253P.

XX (DYNA-) DYNAVAX TECHNOLOGIES CORP.

XX Fearon KL, Dina D, Tuck SF;

XX WPI; 2003-210159/20.

XX Novel chimeric immunomodulatory compound having immunomodulatory activity, useful for modulating an immune response and for treating cancer, has nucleic acid moieties and non-nucleic acid spacer moieties.

PS Disclosure; Page 33; 224pp; English.

XX The invention relates to a novel chimeric immunomodulatory compound (CIC) having immunomodulatory activity, comprising two or more nucleic acid moieties and one or more non-nucleic acid spacer moieties, where at least one non-nucleic acid spacer moiety is covalently joined to two nucleic acid moieties, where the spacer is not a polypeptide, and at least one nucleic acid moiety comprises the sequence 5'-CG-3'. The chimeric immunomodulatory compounds more specifically contain the nucleic acid spacer moieties of linear hexaethylene glycol structure (HEG) subunits. CIC's are useful for modulating an immune response in an individual, where the individual suffers from a disorder associated with a Th2-type immune response which is an allergy or allergy-induced asthma, and an infectious disease. CIC is also useful for increasing IFN-gamma, and an alpha; in an individual, where the individual has idiopathic pulmonary fibrosis, or a viral infection. CIC's are useful for ameliorating a symptom of an infectious disease, or an immunoglobulin E (IgE)-related disorder in an individual, where the IgE-related disorder is allergy, or an allergy-related disorder. CIC's are also useful for treating cancer and can be used for stimulating cellular immune system cells production in an individual. This polynucleotide sequence represents a DNA sequence which is a nucleic acid moiety part of a chimeric immunomodulatory compound of the invention.

SQ Sequence 10 BP; 1 A; 4 C; 3 G; 2 T; 0 U; 0 Other;

Query Match 68.0%; Score 6.8; DB 9; Length 10;
Best Local Similarity 66.7%; Pred. No. 2e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: |||||
DB 9 GACCGTTCG 1

RESULT 28

ADB88816
ID ADB88816 standard; DNA; 10 BP.

XX ADB88816;

DT 04-DEC-2003 (first entry)

DE Chimeric immunomodulatory compound DNA sequence, SEQ ID No 19.

XX Chimeric immunomodulatory compound; CIC; immunomodulatory activity;
KW spacer moiety; linear hexaethylene glycol structure; HEG; immune;
KW Th2-type; allergy; allergy-induced asthma; infectious disease; IFN-gamma;
KW IFN-alpha; idiopathic pulmonary fibrosis; viral infection; ameliorating;
KW immunoglobulin E; IgE; allergy; cancer;
KW stimulating cellular immune system cell; ss.

XX Synthetic.

XX WO2003000922-A2.

XX 03-JAN-2003.

PF 21-JUN-2002; 2002WO-US020025.

XX 21-JUN-2001; 2001US-0299883P.

PR 23-APR-2002; 2002US-0375253P.

XX (DYNA-) DYNAVAX TECHNOLOGIES CORP.

XX Fearon KL, Dina D, Tuck SF;

XX WPI; 2003-210159/20.

XX Novel chimeric immunomodulatory compound having immunomodulatory activity, useful for modulating an immune response and for treating cancer, has nucleic acid moieties and non-nucleic acid spacer moieties.

PS Disclosure; Page 33; 224pp; English.

XX

CC The invention relates to a novel chimeric immunomodulatory compound (CIC)

CC having immunomodulatory activity, comprising two or more nucleic acid

CC moieties and one or more non-nucleic acid spacer moieties, where at least

CC one non-nucleic acid spacer moiety is covalently joined to two nucleic

CC acid moieties, where the spacer is not a polypeptide, and at least one

CC nucleic acid moiety comprises the sequence 5'-CG-3'. The chimeric

CC immunomodulatory compounds more specifically contain the nucleic acid

CC spacer moieties of linear hexaethylene glycol structure (HEG) subunits.

CC CIC's are useful for modulating an immune response in an individual,

CC where the individual suffers from a disorder associated with a Th2-type

CC immune response which is an allergy or allergy-induced asthma, and an

CC infectious disease. CIC is also useful for increasing IFN-gamma; or IFN-

CC alpha; in an individual, where the individual has idiopathic pulmonary

CC fibrosis, or a viral infection. CIC's are useful for ameliorating a

CC symptom of an infectious disease, or an immunoglobulin E (IgE)-related

CC disorder in an individual, where the IgE-related disorder is allergy, or

CC an allergy-related disorder. CIC's are also useful for treating cancer

CC and can be used for stimulating cellular immune system cells production

CC in an individual. This polynucleotide sequence represents a DNA sequence

CC which is a nucleic acid moiety part of a chimeric immunomodulatory compound

CC of the invention.

XX

XX Sequence 10 BP; 2 A; 2 C; 3 G; 2 T; 0 U; 1 Other;

SQ

Query Match 68.0%; Score 6.8; DB 9; Length 10;

Best Local Similarity 66.7%; Pred. No. 2e+05;

Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10

Db :|||:|

2 GAACGTCG 10

RESULT 29

ADB8807

ID ADB88807 standard; DNA; 10 BP.

XX

AC ADB88807;

XX

XX 04-DEC-2003 (first entry)

XX

XX Chimeric immunomodulatory compound DNA sequence, SEQ ID No 10.

XX

KW chimeric immunomodulatory compound; CIC; immunomodulatory activity;

KW spacer moiety; linear hexaethylene glycol structure; HEG; immune;

KW Th2-type; allergy; allergy-induced asthma; infectious disease; IFN-gamma;

KW IFN-alpha; idiopathic pulmonary fibrosis; viral infection; ameliorating;

KW immunoglobulin E; IgE; allergy; cancer;

KW stimulating cellular immune system cell; ss.

XX

OS Synthetic.

XX

XX WO2003000922-A2.

XX

XX 03-JAN-2003.

XX

XX 21-JUN-2002; 2002WO-US020025.

XX

XX 21-JUN-2001; 2001US-0299883P.

XX

XX 23-APR-2002; 2002US-0375253P.

XX

XX (DYNA-) DYNAXVAX TECHNOLOGIES CORP.

XX

XX Fearon KL, Dina D, Tuck SF;

XX

XX WPI; 2003-210159/20.

XX

XX Novel chimeric immunomodulatory compound having immunomodulatory

PT activity, useful for modulating an immune response and for treating

PT cancer, has nucleic acid moieties and non-nucleic acid spacer moieties.

XX

PS Disclosure; Page 32; 224pp; English.

XX

CC The invention relates to a novel chimeric immunomodulatory compound (CIC)

CC having immunomodulatory activity, comprising two or more nucleic acid

CC moieties and one or more non-nucleic acid spacer moieties, where at least

CC one non-nucleic acid spacer moiety is covalently joined to two nucleic

CC acid moieties, where the spacer is not a polypeptide, and at least one

CC nucleic acid moiety comprises the sequence 5'-CG-3'. The chimeric

CC immunomodulatory compounds more specifically contain the nucleic acid

CC spacer moieties of linear hexaethylene glycol structure (HEG) subunits.

CC CIC's are useful for modulating an immune response in an individual,

CC where the individual suffers from a disorder associated with a Th2-type

CC immune response which is an allergy or allergy-induced asthma, and an

CC infectious disease. CIC is also useful for increasing IFN-gamma; or IFN-

CC alpha; in an individual, where the individual has idiopathic pulmonary

CC fibrosis, or a viral infection. CIC's are useful for ameliorating a

CC symptom of an infectious disease, or an immunoglobulin E (IgE)-related

CC disorder in an individual, where the IgE-related disorder is allergy, or

CC an allergy-related disorder. CIC's are also useful for treating cancer

CC and can be used for stimulating cellular immune system cells production

CC in an individual. This polynucleotide sequence represents a DNA sequence

CC which is a nucleic acid moiety part of a chimeric immunomodulatory compound

CC of the invention.

XX

XX Sequence 10 BP; 1 A; 2 C; 3 G; 4 T; 0 U; 0 Other;

SQ

Query Match 68.0%; Score 6.8; DB 9; Length 10;

Best Local Similarity 66.7%; Pred. No. 2e+05;

Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10

Db :|||:|

2 GATCGTCG 10

RESULT 30

ADB88805

ID ADB88805 standard; DNA; 10 BP.

XX

AC ADB88805;

XX

XX 04-DEC-2003 (first entry)

XX

XX Chimeric immunomodulatory compound DNA sequence, SEQ ID No 8.

XX

KW chimeric immunomodulatory compound; CIC; immunomodulatory activity;

KW spacer moiety; linear hexaethylene glycol structure; HEG; immune;

KW Th2-type; allergy; allergy-induced asthma; infectious disease; IFN-gamma;

KW IFN-alpha; idiopathic pulmonary fibrosis; viral infection; ameliorating;

KW immunoglobulin E; IgE; allergy; cancer;

KW stimulating cellular immune system cell; ss.

XX

OS Synthetic.

XX

XX WO2003000922-A2.

XX

XX 03-JAN-2003.

XX

XX 21-JUN-2002; 2002WO-US020025.

XX

XX 21-JUN-2001; 2001US-0299883P.

XX

XX 23-APR-2002; 2002US-0375253P.

XX

XX (DYNA-) DYNAXVAX TECHNOLOGIES CORP.

XX

XX Fearon KL, Dina D, Tuck SF;

XX

XX WPI; 2003-210159/20.

XX

XX Novel chimeric immunomodulatory compound having immunomodulatory

PT activity, useful for modulating an immune response and for treating

PT cancer, has nucleic acid moieties and non-nucleic acid spacer moieties.

XX

PS Disclosure; Page 32; 224pp; English.

XX
CC The invention relates to a novel chimeric immunomodulatory compound (CIC)
CC having immunomodulatory activity, comprising two or more nucleic acid
CC moieties and one or more non-nucleic acid spacer moieties, where at least
CC one non-nucleic acid spacer moiety is covalently joined to two nucleic
CC acid moieties, where the spacer is not a polypeptide, and at least one
CC nucleic acid moiety comprises the sequence 5'-CG-3'. The chimeric
CC immunomodulatory compounds more specifically contain the nucleic acid
CC spacer moieties of linear hexaethylene glycol structure (HEG) subunits.
CC CIC's are useful for modulating an immune response in an individual.
CC where the individual suffers from a disorder associated with a Th2-type
CC immune response which is an allergy or allergy-induced asthma, and an
CC infectious disease. CIC is also useful for increasing IFN-gamma; or IFN-
CC alpha; in an individual, where the individual has idiopathic pulmonary
CC fibrosis, or a viral infection. CIC's are useful for ameliorating a
CC symptom of an infectious disease, or an immunoglobulin E (IgE)-related
CC disorder in an individual, where the IgE-related disorder is allergy, or
CC an allergy-related disorder. CIC's are also useful for treating cancer
CC and can be used for stimulating cellular immune system cells production
CC in an individual. This polynucleotide sequence represents a DNA sequence
CC which is a nucleic acid moiety part of a chimeric immunomodulatory compound
CC of the invention.

XX SQ Sequence 10 BP; 1 A; 3 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 68.0%; Score 6.8; DB 9; Length 10;
Best Local Similarity 66.7%; Pred. No. 2e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGRCTG 10
: |||||
DB 2 GACCGTTCG 10

RESULT 31

ADB88813
ID ADB88813 standard; DNA; 10 BP.

AC ADB88813;
XX
DT 04-DEC-2003 (first entry)

XX Chimeric immunomodulatory compound DNA sequence, SEQ ID No 16.

XX chimeric immunomodulatory compound; CIC; immunomodulatory activity;
KW spacer moiety; linear hexaethylene glycol structure; HEG; immune;
KW Th2-type; allergy; allergy-induced asthma; infectious disease; IFN-gamma;
KW IFN-alpha; idiopathic pulmonary fibrosis; viral infection; ameliorating;
KW immunoglobulin E; IgE; allergy; cancer;
KW stimulating cellular immune system cell; ss.

XX Synthetic.

XX WO2003000922-A2.

XX 03-JAN-2003.

XX 21-JUN-2002; 2002WO-US020025.

XX 21-JUN-2001; 2001US-0299883P.

XX 23-APR-2002; 2002US-0375253P.

XX (DYNA-) DYNAX TECHNOLOGIES CORP.

XX Fearon KL, Dina D, Tuck SF;

XX WPI; 2003-210159/20.

XX Novel chimeric immunomodulatory compound having immunomodulatory
PT activity, useful for modulating an immune response and for treating
PT cancer, has nucleic acid moieties and non-nucleic acid spacer moieties.

XX

PS Disclosure; Page 33; 224pp; English.

XX
CC The invention relates to a novel chimeric immunomodulatory compound (CIC)
CC having immunomodulatory activity, comprising two or more nucleic acid
CC moieties and one or more non-nucleic acid spacer moieties, where at least
CC one non-nucleic acid spacer moiety is covalently joined to two nucleic
CC acid moieties, where the spacer is not a polypeptide, and at least one
CC nucleic acid moiety comprises the sequence 5'-CG-3'. The chimeric
CC immunomodulatory compounds more specifically contain the nucleic acid
CC spacer moieties of linear hexaethylene glycol structure (HEG) subunits.
CC CIC's are useful for modulating an immune response in an individual,
CC where the individual suffers from a disorder associated with a Th2-type
CC immune response which is an allergy or allergy-induced asthma, and an
CC infectious disease. CIC is also useful for increasing IFN-gamma; or IFN-
CC alpha; in an individual, where the individual has idiopathic pulmonary
CC fibrosis, or a viral infection. CIC's are useful for ameliorating a
CC symptom of an infectious disease, or an immunoglobulin E (IgE)-related
CC disorder in an individual, where the IgE-related disorder is allergy, or
CC an allergy-related disorder. CIC's are also useful for treating cancer
CC and can be used for stimulating cellular immune system cells production
CC in an individual. This polynucleotide sequence represents a DNA sequence
CC which is a nucleic acid moiety part of a chimeric immunomodulatory compound
CC of the invention.

XX SQ Sequence 10 BP; 1 A; 3 C; 3 G; 2 T; 0 U; 1 Other;

Query Match 68.0%; Score 6.8; DB 9; Length 10;
Best Local Similarity 66.7%; Pred. No. 2e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGRCTG 10
: |||||
DB 2 GACCGTTCG 10

RESULT 32

ADB88811
ID ADB88811 standard; DNA; 10 BP.

AC ADB88811;
XX
DT 04-DEC-2003 (first entry)

XX Chimeric immunomodulatory compound DNA sequence, SEQ ID No 14.

XX chimeric immunomodulatory compound; CIC; immunomodulatory activity;
KW spacer moiety; linear hexaethylene glycol structure; HEG; immune;
KW Th2-type; allergy; allergy-induced asthma; infectious disease; IFN-gamma;
KW IFN-alpha; idiopathic pulmonary fibrosis; viral infection; ameliorating;
KW immunoglobulin E; IgE; allergy; cancer;
KW stimulating cellular immune system cell; ss.

XX Synthetic.

XX WO2003000922-A2.

XX 03-JAN-2003.

XX 21-JUN-2002; 2002WO-US020025.

XX 21-JUN-2001; 2001US-0299883P.

XX 23-APR-2002; 2002US-0375253P.

XX (DYNA-) DYNAX TECHNOLOGIES CORP.

XX Fearon KL, Dina D, Tuck SF;

XX WPI; 2003-210159/20.

XX Novel chimeric immunomodulatory compound having immunomodulatory
PT activity, useful for modulating an immune response and for treating
PT cancer, has nucleic acid moieties and non-nucleic acid spacer moieties.

XX

PS Disclosure; Page 32; 224pp; English.

XX The invention relates to a novel chimeric immunomodulatory compound (CIC)

CC having immunomodulatory activity, comprising two or more nucleic acid

CC moieties and one or more non-nucleic acid spacer moieties, where at least

CC one non-nucleic acid spacer moiety is covalently joined to two nucleic

CC acid moieties, where the spacer is not a polypeptide, and at least one

CC nucleic acid moiety comprises the sequence 5'-CG-3'. The chimeric

CC immunomodulatory compounds more specifically contain the nucleic acid

CC spacer moieties of linear hexaethylene glycol structure (HEG) subunits.

CC CIC's are useful for modulating an immune response in an individual,

CC where the individual suffers from a disorder associated with a Th2-type

CC immune response which is an allergy or allergy-induced asthma, and an

CC infectious disease. CIC is also useful for increasing IFN-gamma; or IFN-

CC alpha; in an individual, where the individual has idiopathic pulmonary

CC fibrosis, or a viral infection. CIC's are useful for ameliorating a

CC symptom of an infectious disease, or an immunoglobulin E (IGE)-related

CC disorder in an individual, where the IGE-related disorder is allergy, or

CC an allergy-related disorder. CIC's are also useful for treating cancer

CC and can be used for stimulating cellular immune system cells production

CC in an individual. This polynucleotide sequence represents a DNA sequence

CC which is a nucleic acid moiety part of a chimeric immunomodulatory compound

CC of the invention.

XX

XX Sequence 10 BP; 1 A; 3 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 68.0%; Score 6.8; DB 9; Length 10;

Best Local Similarity 66.7%; Pred. No. 2e+05;

Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10

DB :|||:|

2 TACCGTTCG 10

RESULT 33

ADB88802

ID ADB88802 standard; DNA; 10 BP.

XX

AC ADB88802;

XX

XX 04-DEC-2003 (first entry)

XX

XX Chimeric immunomodulatory compound DNA sequence, SEQ ID No 5.

XX

KW Chimeric immunomodulatory compound; CIC; immunomodulatory activity;

KW spacer moiety; linear hexaethylene glycol structure; HEG; immune;

KW Th2-type; allergy; allergy-induced asthma; infectious disease; IFN-gamma;

KW IFN-alpha; idiopathic pulmonary fibrosis; viral infection; ameliorating;

KW immunoglobulin E; IGE; allergy; cancer;

KW stimulating cellular immune system cell; ss.

XX

OS Synthetic.

XX

XX WO2003000922-A2.

XX

XX 03-JAN-2003.

XX

XX 21-JUN-2002; 2002WO-US020025.

XX

XX 21-JUN-2001; 2001US-0299883P.

XX

XX 23-APR-2002; 2002US-0375253P.

XX

XX (DYNA-) DYNAX TECHNOLOGIES CORP.

XX

XX Fearon KL, Dina D, Tuck SF;

XX WPI; 2003-210159/20.

XX

XX Novel chimeric immunomodulatory compound having immunomodulatory

PT activity, useful for modulating an immune response and for treating

PT cancer, has nucleic acid moieties and non-nucleic acid spacer moieties.

XX

PS Disclosure; Page 32; 224pp; English.

XX The invention relates to a novel chimeric immunomodulatory compound (CIC)

CC having immunomodulatory activity, comprising two or more nucleic acid

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CC one non-nucleic acid spacer moiety is covalently joined to two nucleic

CC acid moieties, where the spacer is not a polypeptide, and at least one

CC nucleic acid moiety comprises the sequence 5'-CG-3'. The chimeric

CC immunomodulatory compounds more specifically contain the nucleic acid

CC spacer moieties of linear hexaethylene glycol structure (HEG) subunits.

CC CIC's are useful for modulating an immune response in an individual,

CC where the individual suffers from a disorder associated with a Th2-type

CC immune response which is an allergy or allergy-induced asthma, and an

CC infectious disease. CIC is also useful for increasing IFN-gamma; or IFN-

CC alpha; in an individual, where the individual has idiopathic pulmonary

CC fibrosis, or a viral infection. CIC's are useful for ameliorating a

CC symptom of an infectious disease, or an immunoglobulin E (IGE)-related

CC disorder in an individual, where the IGE-related disorder is allergy, or

CC an allergy-related disorder. CIC's are also useful for treating cancer

CC and can be used for stimulating cellular immune system cells production

CC in an individual. This polynucleotide sequence represents a DNA sequence

CC which is a nucleic acid moiety part of a chimeric immunomodulatory compound

CC of the invention.

XX

XX Sequence 10 BP; 2 A; 2 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 68.0%; Score 6.8; DB 9; Length 10;

Best Local Similarity 66.7%; Pred. No. 2e+05;

Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10

DB :|||:|

2 GAACGTTTCG 10

RESULT 34

ADB88819

ID ADB88819 standard; DNA; 10 BP.

XX

AC ADB88819;

XX

XX 04-DEC-2003 (first entry)

XX

XX Chimeric immunomodulatory compound DNA sequence, SEQ ID No 22.

XX

KW Chimeric immunomodulatory compound; CIC; immunomodulatory activity;

KW spacer moiety; linear hexaethylene glycol structure; HEG; immune;

KW Th2-type; allergy; allergy-induced asthma; infectious disease; IFN-gamma;

KW IFN-alpha; idiopathic pulmonary fibrosis; viral infection; ameliorating;

KW immunoglobulin E; IGE; allergy; cancer;

KW stimulating cellular immune system cell; ss.

XX

OS Synthetic.

XX

XX WO2003000922-A2.

XX

XX 03-JAN-2003.

XX

XX 21-JUN-2002; 2002WO-US020025.

XX

XX 21-JUN-2001; 2001US-0299883P.

XX

XX 23-APR-2002; 2002US-0375253P.

XX

XX (DYNA-) DYNAX TECHNOLOGIES CORP.

XX

XX Fearon KL, Dina D, Tuck SF;

XX WPI; 2003-210159/20.

XX

XX Novel chimeric immunomodulatory compound having immunomodulatory

PT activity, useful for modulating an immune response and for treating

PT cancer, has nucleic acid moieties and non-nucleic acid spacer moieties.

XX

PS Disclosure; Page 33; 224pp; English.

XX The invention relates to a novel chimeric immunomodulatory compound (CIC) having immunomodulatory activity, comprising two or more nucleic acid moieties and one or more non-nucleic acid spacer moieties, where at least one non-nucleic acid spacer moiety is covalently joined to two nucleic acid moieties, where the spacer is not a polypeptide, and at least one nucleic acid moiety comprises the sequence 5'-CG-3'. The chimeric immunomodulatory compounds more specifically contain the nucleic acid spacer moieties of linear hexaethylene glycol structure (HEG) subunits. CIC's are useful for modulating an immune response in an individual, where the individual suffers from a disorder associated with a Th2-type immune response which is an allergy or allergy-induced asthma, and an infectious disease. CIC is also useful for increasing IFN-gamma, or IFN-alpha, in an individual, where the individual has idiopathic pulmonary fibrosis, or a viral infection. CIC's are useful for ameliorating a symptom of an infectious disease, or an immunoglobulin E (IgE)-related disorder in an individual, where the IgE-related disorder is allergy, or an allergy-related disorder. CIC's are also useful for treating cancer and can be used for stimulating cellular immune system cells production in an individual. This polynucleotide sequence represents a DNA sequence which is a nucleic acid moiety part of a chimeric immunomodulatory compound of the invention.

XX Sequence 10 BP; 2 A; 2 C; 2 G; 4 T; 0 U; 0 Other;

Query Match 68.0%; Score 6.8; DB 9; Length 10;
Best Local Similarity 66.7%; Pred. No. 2e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGKTGC 10
: |||: |||
Db 2 TAACGTTGC 10

RESULT 35

ADB88806
ID ADB88806 standard; DNA; 10 BP.

XX ADB88806;

DT 04-DEC-2003 (first entry)

XX Chimeric immunomodulatory compound DNA sequence, SEQ ID NO 9.

XX chimeric immunomodulatory compound; CIC; immunomodulatory activity; spacer moiety; linear hexaethylene glycol structure; HEG; immune; Th2-type; allergy; allergy-induced asthma; infectious disease; IFN-gamma; IFN-alpha; idiopathic pulmonary fibrosis; viral infection; ameliorating; immunoglobulin E; IgE; allergy; cancer; stimulating cellular immune system cell; ss.

XX Synthetic.

XX WO2003000922-A2.

XX 03-JAN-2003.

XX 21-JUN-2002; 2002WO-US020025.

XX 21-JUN-2001; 2001US-0299883P.

XX 23-APR-2002; 2002US-0375253P.

XX (DYNA-) DYNAVAX TECHNOLOGIES CORP.

XX Fearon KL, Dina D, Tuck SF;

XX WPI; 2003-210159/20.

XX Novel chimeric immunomodulatory compound having immunomodulatory activity, useful for modulating an immune response and for treating cancer, has nucleic acid moieties and non-nucleic acid spacer moieties.

XX

PS Disclosure; Page 32; 224pp; English.

XX The invention relates to a novel chimeric immunomodulatory compound (CIC) having immunomodulatory activity, comprising two or more nucleic acid moieties and one or more non-nucleic acid spacer moieties, where at least one non-nucleic acid spacer moiety is covalently joined to two nucleic acid moieties, where the spacer is not a polypeptide, and at least one nucleic acid moiety comprises the sequence 5'-CG-3'. The chimeric immunomodulatory compounds more specifically contain the nucleic acid spacer moieties of linear hexaethylene glycol structure (HEG) subunits. CIC's are useful for modulating an immune response in an individual, where the individual suffers from a disorder associated with a Th2-type immune response which is an allergy or allergy-induced asthma, and an infectious disease. CIC is also useful for increasing IFN-gamma, or IFN-alpha, in an individual, where the individual has idiopathic pulmonary fibrosis, or a viral infection. CIC's are useful for ameliorating a symptom of an infectious disease, or an immunoglobulin E (IgE)-related disorder in an individual, where the IgE-related disorder is allergy, or an allergy-related disorder. CIC's are also useful for treating cancer and can be used for stimulating cellular immune system cells production in an individual. This polynucleotide sequence represents a DNA sequence which is a nucleic acid moiety part of a chimeric immunomodulatory compound of the invention.

XX Sequence 10 BP; 1 A; 2 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 68.0%; Score 6.8; DB 9; Length 10;
Best Local Similarity 66.7%; Pred. No. 2e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGKTGC 10
: |||: |||
Db 2 GATCGGTGC 10

RESULT 36

ADB88814
ID ADB88814 standard; DNA; 10 BP.

XX ADB88814;

DT 04-DEC-2003 (first entry)

XX Chimeric immunomodulatory compound DNA sequence, SEQ ID NO 17.

XX chimeric immunomodulatory compound; CIC; immunomodulatory activity; spacer moiety; linear hexaethylene glycol structure; HEG; immune; Th2-type; allergy; allergy-induced asthma; infectious disease; IFN-gamma; IFN-alpha; idiopathic pulmonary fibrosis; viral infection; ameliorating; immunoglobulin E; IgE; allergy; cancer; stimulating cellular immune system cell; ss.

XX Synthetic.

XX WO2003000922-A2.

XX 03-JAN-2003.

XX 21-JUN-2002; 2002WO-US020025.

XX 21-JUN-2001; 2001US-0299883P.

XX 23-APR-2002; 2002US-0375253P.

XX (DYNA-) DYNAVAX TECHNOLOGIES CORP.

XX Fearon KL, Dina D, Tuck SF;

XX WPI; 2003-210159/20.

XX Novel chimeric immunomodulatory compound having immunomodulatory activity, useful for modulating an immune response and for treating cancer, has nucleic acid moieties and non-nucleic acid spacer moieties.

XX

PS Disclosure; Page 33; 224pp; English.

XX The invention relates to a novel chimeric immunomodulatory compound (CIC) having immunomodulatory activity, comprising two or more nucleic acid moieties and one or more non-nucleic acid spacer moieties, where at least one non-nucleic acid spacer moiety is covalently joined to two nucleic acid moieties, where the spacer is not a polypeptide, and at least one nucleic acid moiety comprises the sequence 5'-CG-3'. The chimeric immunomodulatory compounds more specifically contain the nucleic acid spacer moieties of linear hexaethylene glycol structure (HEG) subunits. CIC's are useful for modulating an immune response in an individual, where the individual suffers from a disorder associated with a Th2-type immune response which is an allergy or allergy-induced asthma, and an infectious disease. CIC is also useful for increasing IFN-gamma; or IFN-alpha; in an individual, where the individual has idiopathic pulmonary fibrosis, or a viral infection. CIC's are useful for ameliorating a symptom of an infectious disease, or an immunoglobulin E (IgE)-related disorder in an individual, where the IgE-related disorder is allergy, or an allergy-related disorder. CIC's are also useful for treating cancer and can be used for stimulating cellular immune system cells production in an individual. This polynucleotide sequence represents a DNA sequence which is a nucleic acid moiety part of a chimeric immunomodulatory compound of the invention.

XX Sequence 10 BP; 2 A; 3 C; 3 G; 2 T; 0 U; 0 Other;

XX Query Match 68.0%; Score 6.8; DB 9; Length 10;

XX Best Local Similarity 66.7%; Pred. No. 2e+05; Length 10;

XX Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10

DB 2 GAACGTCG 10

RESULT 37

ADB88814/C

ID ADB88814 standard; DNA; 10 BP.

AC ADB88814;

XX 04-DEC-2003 (first entry)

XX Chimeric immunomodulatory compound DNA sequence, SEQ ID No 17.

XX Chimeric immunomodulatory compound; CIC; immunomodulatory activity; spacer moiety; linear hexaethylene glycol structure; HEG; immune; Th2-type; allergy; allergy-induced asthma; infectious disease; IFN-gamma; IFN-alpha; idiopathic pulmonary fibrosis; viral infection; ameliorating; immunoglobulin E; IgE; allergy; cancer; stimulating cellular immune system cell; ss.

XX Synthetic.

XX WO2003000922-A2.

XX 03-JAN-2003.

XX 21-JUN-2002; 2002WO-US020025.

XX 21-JUN-2001; 2001US-0299883P.

XX 23-APR-2002; 2002US-0375253P.

XX (DYNA-) DYNAVAX TECHNOLOGIES CORP.

XX Fearon KL, Dina D, Tuck SF;

XX WPI; 2003-210159/20.

XX Novel chimeric immunomodulatory compound having immunomodulatory activity, useful for modulating an immune response and for treating cancer, has nucleic acid moieties and non-nucleic acid spacer moieties.

XX

PS Disclosure; Page 33; 224pp; English.

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XX Sequence 10 BP; 2 A; 3 C; 3 G; 2 T; 0 U; 0 Other;

XX Query Match 68.0%; Score 6.8; DB 9; Length 10;

XX Best Local Similarity 66.7%; Pred. No. 2e+05; Length 10;

XX Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10

DB 2 GAACGTCG 10

RESULT 38

ADB88803

ID ADB88803 standard; DNA; 10 BP.

AC ADB88803;

XX 04-DEC-2003 (first entry)

XX Chimeric immunomodulatory compound DNA sequence, SEQ ID No 6.

XX Chimeric immunomodulatory compound; CIC; immunomodulatory activity; spacer moiety; linear hexaethylene glycol structure; HEG; immune; Th2-type; allergy; allergy-induced asthma; infectious disease; IFN-gamma; IFN-alpha; idiopathic pulmonary fibrosis; viral infection; ameliorating; immunoglobulin E; IgE; allergy; cancer; stimulating cellular immune system cell; ss.

XX Synthetic.

XX WO2003000922-A2.

XX 03-JAN-2003.

XX 21-JUN-2002; 2002WO-US020025.

XX 21-JUN-2001; 2001US-0299883P.

XX 23-APR-2002; 2002US-0375253P.

XX (DYNA-) DYNAVAX TECHNOLOGIES CORP.

XX Fearon KL, Dina D, Tuck SF;

XX WPI; 2003-210159/20.

XX Novel chimeric immunomodulatory compound having immunomodulatory activity, useful for modulating an immune response and for treating cancer, has nucleic acid moieties and non-nucleic acid spacer moieties.

XX

PS Disclosure; Page 32; 224pp; English.
 XX The invention relates to a novel chimeric immunomodulatory compound (CIC)
 CC having immunomodulatory activity, comprising two or more nucleic acid
 CC moieties and one or more non-nucleic acid spacer moieties, where at least
 CC one non-nucleic acid spacer moiety is covalently joined to two nucleic
 CC acid moieties, where the spacer is not a polypeptide, and at least one
 CC nucleic acid moiety comprises the sequence 5'-CG-3'. The chimeric
 CC immunomodulatory compounds more specifically contain the nucleic acid
 CC spacer moieties of linear hexaethylene glycol structure (HEG) subunits.
 CC CIC's are useful for modulating an immune response in an individual,
 CC where the individual suffers from a disorder associated with a Th2-type
 CC immune response which is an allergy or allergy-induced asthma, and an
 CC infectious disease. CIC is also useful for increasing IFN-gamma, or IFN-
 CC alpha; in an individual, where the individual has idiopathic pulmonary
 CC fibrosis, or a viral infection. CIC's are useful for ameliorating a
 CC symptom of an infectious disease, or an immunoglobulin E (IgE)-related
 CC disorder in an individual, where the IgE-related disorder is allergy, or
 CC an allergy-related disorder. CIC's are also useful for treating cancer
 CC and can be used for stimulating cellular immune system cells production
 CC in an individual. This polynucleotide sequence represents a DNA sequence
 CC which is a nucleic acid moiety part of a chimeric immunomodulatory compound
 CC of the invention.
 XX
 SQ Sequence 10 BP; 2 A; 2 C; 4 G; 2 T; 0 U; 0 Other;
 Query Match 68.0%; Score 6.8; DB 9; Length 10;
 Best Local Similarity 66.7%; Pred. No. 2e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
 QY 2 DANCGTCTG 10
 : |||:
 Db 2 GAACGTTCG 10
 RESULT 39
 ADB88808
 ID ADB88808 standard; DNA; 10 BP.
 XX
 AC ADB88808;
 XX
 DT 04-DEC-2003 (first entry)
 DE
 XX Chimeric immunomodulatory compound DNA sequence, SEQ ID No 11.
 KW chimeric immunomodulatory compound; CIC; immunomodulatory activity;
 KW spacer moiety; linear hexaethylene glycol structure; HEG; immune;
 KW Th2-type; allergy; allergy-induced asthma; infectious disease; IFN-gamma;
 KW IFN-alpha; idiopathic pulmonary fibrosis; viral infection; ameliorating;
 KW immunoglobulin E; IgE; allergy; cancer;
 KW stimulating cellular immune system cell; ss.
 XX
 OS Synthetic.
 XX
 XX WO2003000922-A2.
 XX
 XX 03-JAN-2003.
 XX
 XX 21-JUN-2002; 2002WO-US020025.
 XX
 XX 21-JUN-2001; 2001US-0299883P.
 XX 23-APR-2002; 2002US-0375253P.
 XX
 XX (DYNA-) DYNAVAX TECHNOLOGIES CORP.
 XX
 XX Fearon KL, Dina D, Tuck SF;
 XX WPI; 2003-210159/20.
 XX
 XX Novel chimeric immunomodulatory compound having immunomodulatory
 PT activity, useful for modulating an immune response and for treating
 PT cancer, has nucleic acid moieties and non-nucleic acid spacer moieties.
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 XX The invention relates to a novel chimeric immunomodulatory compound (CIC)
 CC having immunomodulatory activity, comprising two or more nucleic acid
 CC moieties and one or more non-nucleic acid spacer moieties, where at least
 CC one non-nucleic acid spacer moiety is covalently joined to two nucleic
 CC acid moieties, where the spacer is not a polypeptide, and at least one
 CC nucleic acid moiety comprises the sequence 5'-CG-3'. The chimeric
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 CC spacer moieties of linear hexaethylene glycol structure (HEG) subunits.
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 CC immune response which is an allergy or allergy-induced asthma, and an
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 CC alpha; in an individual, where the individual has idiopathic pulmonary
 CC fibrosis, or a viral infection. CIC's are useful for ameliorating a
 CC symptom of an infectious disease, or an immunoglobulin E (IgE)-related
 CC disorder in an individual, where the IgE-related disorder is allergy, or
 CC an allergy-related disorder. CIC's are also useful for treating cancer
 CC and can be used for stimulating cellular immune system cells production
 CC in an individual. This polynucleotide sequence represents a DNA sequence
 CC which is a nucleic acid moiety part of a chimeric immunomodulatory compound
 CC of the invention.
 XX
 SQ Sequence 10 BP; 2 A; 2 C; 4 G; 2 T; 0 U; 0 Other;
 Query Match 68.0%; Score 6.8; DB 9; Length 10;
 Best Local Similarity 66.7%; Pred. No. 2e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
 QY 2 DANCGTCTG 10
 : |||:
 Db 2 GAACGTTCG 10
 RESULT 40
 ADB88810
 ID ADB88810 standard; DNA; 10 BP.
 XX
 AC ADB88810;
 XX
 DT 04-DEC-2003 (first entry)
 DE
 XX Chimeric immunomodulatory compound DNA sequence, SEQ ID No 13.
 KW chimeric immunomodulatory compound; CIC; immunomodulatory activity;
 KW spacer moiety; linear hexaethylene glycol structure; HEG; immune;
 KW Th2-type; allergy; allergy-induced asthma; infectious disease; IFN-gamma;
 KW IFN-alpha; idiopathic pulmonary fibrosis; viral infection; ameliorating;
 KW immunoglobulin E; IgE; allergy; cancer;
 KW stimulating cellular immune system cell; ss.
 XX
 OS Synthetic.
 XX
 XX WO2003000922-A2.
 XX
 XX 03-JAN-2003.
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 XX 21-JUN-2002; 2002WO-US020025.
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 XX (DYNA-) DYNAVAX TECHNOLOGIES CORP.
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 XX WPI; 2003-210159/20.
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 PT activity, useful for modulating an immune response and for treating
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XX Sequence 10 BP; 1 A; 2 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 68.0%; Score 6.8; DB 9; Length 10;

Best Local Similarity 66.7%; Pred. No. 2e+05;

Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGKTCG 10

Db 2 TATCGTCG 10

RESULT 41

ADB88809

ID ADB88809 standard; DNA; 10 BP.

AC ADB88809;

XX 04-DEC-2003 (first entry)

XX Chimeric immunomodulatory compound DNA sequence, SEQ ID No 12.

XX Chimeric immunomodulatory compound; CIC; immunomodulatory activity; spacer moiety; linear hexaethylene glycol structure; HEG; immune; Th2-type; allergy; allergy-induced asthma; infectious disease; IFN-gamma; IFN-alpha; idiopathic pulmonary fibrosis; viral infection; ameliorating; immunoglobulin E; IgE; allergy; cancer; stimulating cellular immune system cell; ss.

XX Synthetic.

XX WO2003000922-A2.

XX 03-JAN-2003.

XX 21-JUN-2002; 2002WO-US020025.

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XX 23-APR-2002; 2002US-0375253P.

XX (DYNA-) DYNAXVAX TECHNOLOGIES CORP.

XX Fearon KL, Dina D, Tuck SF;

XX WPI; 2003-210159/20.

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XX

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XX Sequence 10 BP; 2 A; 2 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 68.0%; Score 6.8; DB 9; Length 10;

Best Local Similarity 66.7%; Pred. No. 2e+05;

Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGKTCG 10

Db 2 TAACGTTCG 10

RESULT 42

ADB88812

ID ADB88812 standard; DNA; 10 BP.

AC ADB88812;

XX 04-DEC-2003 (first entry)

XX Chimeric immunomodulatory compound DNA sequence, SEQ ID No 15.

XX Chimeric immunomodulatory compound; CIC; immunomodulatory activity; spacer moiety; linear hexaethylene glycol structure; HEG; immune; Th2-type; allergy; allergy-induced asthma; infectious disease; IFN-gamma; IFN-alpha; idiopathic pulmonary fibrosis; viral infection; ameliorating; immunoglobulin E; IgE; allergy; cancer; stimulating cellular immune system cell; ss.

XX Synthetic.

XX WO2003000922-A2.

XX 03-JAN-2003.

XX 21-JUN-2002; 2002WO-US020025.

XX 21-JUN-2001; 2001US-0299883P.

XX 23-APR-2002; 2002US-0375253P.

XX (DYNA-) DYNAXVAX TECHNOLOGIES CORP.

XX Fearon KL, Dina D, Tuck SF;

XX WPI; 2003-210159/20.

XX Novel chimeric immunomodulatory compound having immunomodulatory PT activity, useful for modulating an immune response and for treating PT cancer, has nucleic acid moieties and non-nucleic acid spacer moieties.

XX

PS Disclosure; Page 33; 224pp; English.
 XX
 CC The invention relates to a novel chimeric immunomodulatory compound (CIC)
 CC having immunomodulatory activity, comprising two or more nucleic acid
 CC moieties and one or more non-nucleic acid spacer moieties, where at least
 CC one non-nucleic acid spacer moiety is covalently joined to two nucleic
 CC acid moieties, where the spacer is not a polypeptide, and at least one
 CC nucleic acid moiety comprises the sequence 5'-CG-3'. The chimeric
 CC immunomodulatory compounds more specifically contain the nucleic acid
 CC spacer moieties of linear hexaethylene glycol structure (HEG) subunits.
 CC CIC's are useful for modulating an immune response in an individual,
 CC where the individual suffers from a disorder associated with a Th2-type
 CC immune response which is an allergy or allergy-induced asthma, and an
 CC infectious disease. CIC is also useful for increasing IFN-gamma, or IFN-
 CC alpha; in an individual, where the individual has idiopathic pulmonary
 CC fibrosis, or a viral infection. CIC's are useful for ameliorating a
 CC symptom of an infectious disease, or an immunoglobulin E (IgE)-related
 CC disorder in an individual, where the IgE-related disorder is allergy, or
 CC an allergy-related disorder. CIC's are also useful for treating cancer
 CC and can be used for stimulating cellular immune system cells production
 CC in an individual. This polynucleotide sequence represents a DNA sequence
 CC which is a nucleic acid moiety part of a chimeric immunomodulatory compound
 CC of the invention.
 XX
 SQ Sequence 10 BP; 2 A; 3 C; 3 G; 2 T; 0 U; 0 Other;
 Query Match 68.0%; Score 6.8; DB 9; Length 10;
 Best Local Similarity 66.7%; Pred. No. 2e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
 QY 2 DANCGETCG 10
 : |||:
 Db 2 AACCGTTCG 10
 RESULT 43
 AD888817
 ID ADB88817 standard; DNA; 10 BP.
 AC ADB88817;
 XX
 DT 04-DEC-2003 (first entry)
 XX
 DE Chimeric immunomodulatory compound DNA sequence, SEQ ID NO 20.
 XX
 KW chimeric immunomodulatory compound; CIC; immunomodulatory activity;
 KW spacer moiety; linear hexaethylene glycol structure; HEG; immune;
 KW Th2-type; allergy; allergy-induced asthma; infectious disease; IFN-gamma;
 KW IFN-alpha; idiopathic pulmonary fibrosis; viral infection; ameliorating;
 KW immunoglobulin E; IgE; allergy; cancer;
 KW stimulating cellular immune system cell; ss.
 XX
 OS Synthetic.
 XX
 PN WO2003000922-A2.
 XX
 PD 03-JAN-2003.
 XX
 PF 21-JUN-2002; 2002WO-US020025.
 XX
 PR 21-JUN-2001; 2001US-0299883P.
 PR 23-APR-2002; 2002US-0375253P.
 XX
 PA (DYNA-) DYNAVAX TECHNOLOGIES CORP.
 XX
 PI Fearon KL, Dina D, Tuck SF;
 XX WPI; 2003-210159/20.
 XX
 PT Novel chimeric immunomodulatory compound having immunomodulatory
 PT activity, useful for modulating an immune response and for treating
 XX cancer, has nucleic acid moieties and non-nucleic acid spacer moieties.
 XX

PS Disclosure; Page 33; 224pp; English.
 XX
 CC The invention relates to a novel chimeric immunomodulatory compound (CIC)
 CC having immunomodulatory activity, comprising two or more nucleic acid
 CC moieties and one or more non-nucleic acid spacer moieties, where at least
 CC one non-nucleic acid spacer moiety is covalently joined to two nucleic
 CC acid moieties, where the spacer is not a polypeptide, and at least one
 CC nucleic acid moiety comprises the sequence 5'-CG-3'. The chimeric
 CC immunomodulatory compounds more specifically contain the nucleic acid
 CC spacer moieties of linear hexaethylene glycol structure (HEG) subunits.
 CC CIC's are useful for modulating an immune response in an individual,
 CC where the individual suffers from a disorder associated with a Th2-type
 CC immune response which is an allergy or allergy-induced asthma, and an
 CC infectious disease. CIC is also useful for increasing IFN-gamma, or IFN-
 CC alpha; in an individual, where the individual has idiopathic pulmonary
 CC fibrosis, or a viral infection. CIC's are useful for ameliorating a
 CC symptom of an infectious disease, or an immunoglobulin E (IgE)-related
 CC disorder in an individual, where the IgE-related disorder is allergy, or
 CC an allergy-related disorder. CIC's are also useful for treating cancer
 CC and can be used for stimulating cellular immune system cells production
 CC in an individual. This polynucleotide sequence represents a DNA sequence
 CC which is a nucleic acid moiety part of a chimeric immunomodulatory compound
 CC of the invention.
 XX
 SQ Sequence 10 BP; 2 A; 2 C; 2 G; 3 T; 1 U; 0 Other;
 Query Match 68.0%; Score 6.8; DB 9; Length 10;
 Best Local Similarity 66.7%; Pred. No. 2e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
 QY 2 DANCGETCG 10
 : |||:
 Db 2 TAACGUTCG 10
 RESULT 44
 ADK67593
 ID ADK67593 standard; DNA; 10 BP.
 AC ADK67593;
 XX
 DT 06-MAY-2004 (first entry)
 XX
 DE Immunostimulant oligonucleotide used in immunomodulatory composition.
 XX
 KW Immunomodulator; immunostimulant; vaccine; ss.
 XX
 OS Synthetic.
 XX
 PN WO2004014322-A2.
 XX
 PD 19-FEB-2004.
 XX
 PF 12-AUG-2003; 2003WO-US025415.
 XX
 PR 12-AUG-2002; 2002US-0402968P.
 XX
 PA (DYNA-) DYNAVAX TECHNOLOGIES CORP.
 XX
 PI Van Nest G, Tuck S;
 XX WPI; 2004-238627/22.
 XX
 PT Immunomodulatory composition useful for modulating immune responses in
 PT individuals, comprises immunomodulatory particles or a particulate
 PT composition made by mixing cationic condensing agent and an
 PT immunomodulatory compound.
 XX
 PS Disclosure; SEQ ID NO 23; 90pp; English.
 XX
 CC The present sequence is that of an immunomodulatory compound (IMC) that
 CC can be used in novel immunomodulatory compositions of the invention. The
 CC IMC may contain modifications of the 3'OH or 5'OH group, the nucleotide

CC base, the sugar component and phosphate group. Novel immunomodulatory
 CC compositions of the invention comprise a cationic condensing agent, an
 CC IMC comprising the nucleotide sequence 5'-CG-3', and a stabilising agent.
 CC The compositions form particles which have increased immunomodulatory
 CC activity as compared to IMCs not formulated in the compositions of the
 CC invention. The immunomodulatory compositions can be used for
 CC immunomodulation of an individual, e.g. when the individual suffers from
 CC a disorder associated with a Th2-type immune response (e.g. allergies or
 CC allergy-induced asthma), is receiving vaccines such as therapeutic
 CC vaccines (e.g. vaccines comprising an allergy epitope, a mycobacterial
 CC epitope or a tumour associated epitope) or prophylactic vaccines, suffers
 CC from cancer, suffers from an infectious disease or is at risk of exposure
 CC to an infectious agent.

XX Sequence 10 BP; 2 A; 2 C; 4 G; 2 T; 0 U; 0 Other;

Query Match 68.0%; Score 6.8; DB 12; Length 10;
 Best Local Similarity 66.7%; Pred. No. 2e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
 :|||:||||
 Db 2 GAACGTTTCG 10

RESULT 45
 ADK67582
 ID ADK67582 standard; DNA; 10 BP.
 XX
 AC ADK67582;
 XX
 DT 06-MAY-2004 (first entry)
 XX
 DE Immunostimulant oligonucleotide used in immunomodulatory composition.
 XX
 KW Immunomodulator; immunostimulant; vaccine; ss.

OS Synthetic.

PN WO2004014322-A2.

XX 19-FEB-2004.

XX 12-AUG-2003; 2003WO-US025415.

XX 12-AUG-2002; 2002US-0402968P.

XX (DYNA-) DYNAVAX TECHNOLOGIES CORP.

XX Van Nest G, Tuck S;

XX WPI; 2004-238627/22.

XX Immunomodulatory composition useful for modulating immune responses in
 PT individuals, comprises immunomodulatory particles or a particulate
 PT composition made by mixing cationic condensing agent and an
 PT immunomodulatory compound.

XX Disclosure; SEQ ID NO 12; 90pp; English.

XX The present sequence is that of an immunomodulatory compound (IMC) that
 CC can be used in novel immunomodulatory compositions of the invention. The
 CC IMC may contain modifications of the 3'OH or 5'OH group, the nucleotide
 CC base, the sugar component and phosphate group. Novel immunomodulatory
 CC compositions of the invention comprise a cationic condensing agent, an
 CC IMC comprising the nucleotide sequence 5'-CG-3', and a stabilising agent.
 CC The compositions form particles which have increased immunomodulatory
 CC activity as compared to IMCs not formulated in the compositions of the
 CC invention. The immunomodulatory compositions can be used for
 CC immunomodulation of an individual, e.g. when the individual suffers from
 CC a disorder associated with a Th2-type immune response (e.g. allergies or
 CC allergy-induced asthma), is receiving vaccines such as therapeutic
 CC vaccines (e.g. vaccines comprising an allergy epitope, a mycobacterial

CC epitope or a tumour associated epitope) or prophylactic vaccines, suffers
 CC from cancer, suffers from an infectious disease or is at risk of exposure
 CC to an infectious agent.

SQ Sequence 10 BP; 2 A; 2 C; 3 G; 2 T; 1 U; 0 Other;
 Query Match 68.0%; Score 6.8; DB 12; Length 10;
 Best Local Similarity 66.7%; Pred. No. 2e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
 :|||:||||
 Db 2 GAACGTTTCG 10

RESULT 46
 ADK67580
 ID ADK67580 standard; DNA; 10 BP.
 XX
 AC ADK67580;
 XX
 DT 06-MAY-2004 (first entry)
 XX
 DE Immunostimulant oligonucleotide used in immunomodulatory composition.
 XX
 KW Immunomodulator; immunostimulant; vaccine; DNA-RNA hybrid; ss.

OS Synthetic.

XX Key Location/Qualifiers
 FT modified_base 1 /tag= a
 FT /mod_base= OTHER
 FT /note= "OTHER= 5-bromocytosine"
 FT modified_base 5
 FT /tag= b
 FT /mod_base= OTHER
 FT /note= "OTHER= 5-bromocytosine"

XX WO2004014322-A2.

XX 19-FEB-2004.

XX 12-AUG-2003; 2003WO-US025415.

XX 12-AUG-2002; 2002US-0402968P.

XX (DYNA-) DYNAVAX TECHNOLOGIES CORP.

XX Van Nest G, Tuck S;

XX WPI; 2004-238627/22.

XX Immunomodulatory composition useful for modulating immune responses in
 PT individuals, comprises immunomodulatory particles or a particulate
 PT composition made by mixing cationic condensing agent and an
 PT immunomodulatory compound.

XX Disclosure; SEQ ID NO 10; 90pp; English.

XX The present sequence is that of an immunomodulatory compound (IMC) that
 CC can be used in novel immunomodulatory compositions of the invention. The
 CC IMC may contain modifications of the 3'OH or 5'OH group, the nucleotide
 CC base, the sugar component and phosphate group. Novel immunomodulatory
 CC compositions of the invention comprise a cationic condensing agent, an
 CC IMC comprising the nucleotide sequence 5'-CG-3', and a stabilising agent.
 CC The compositions form particles which have increased immunomodulatory
 CC activity as compared to IMCs not formulated in the compositions of the
 CC invention. The immunomodulatory compositions can be used for
 CC immunomodulation of an individual, e.g. when the individual suffers from
 CC a disorder associated with a Th2-type immune response (e.g. allergies or
 CC allergy-induced asthma), is receiving vaccines such as therapeutic
 CC vaccines (e.g. vaccines comprising an allergy epitope, a mycobacterial

CC epitope or a tumour associated epitope) or prophylactic vaccines, suffers
 CC from cancer, suffers from an infectious disease or is at risk of exposure
 CC to an infectious agent.

XX
 SQ Sequence 10 BP; 2 A; 3 C; 3 G; 1 T; 1 U; 0 Other;

Query Match 68.0%; Score 6.8; DB 12; Length 10;
 Best Local Similarity 66.7%; Pred. No. 2e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

OY 2 DANCCKTCG 10
 :|||:||||
 Db 2 GAACGTCG 10

RESULT 47

ADK67580/c
 ID ADK67580 standard; DNA; 10 BP.

XX
 AC ADK67580;

XX
 DT 06-MAY-2004 (first entry)

XX Immunostimulant oligonucleotide used in immunomodulatory composition.

XX Immunomodulator; immunostimulant; vaccine; DNA-RNA hybrid; ss.

XX Synthetic.

PH Key Location/Qualifiers
 modified_base 1

FT /*tag= a

FT /mod_base= OTHER

FT /note= "OTHER= 5-bromocytosine"

FT modified_base 5

FT /*tag= b

FT /mod_base= OTHER

FT /note= "OTHER= 5-bromocytosine"

XX WO2004014322-A2.

XX 19-FEB-2004.

XX 12-AUG-2003; 2003WO-US025415.

XX 12-AUG-2002; 2002US-0402968P.

XX (DYNA-) DYNAVAX TECHNOLOGIES CORP.

XX Van Nest G, Tuck S;

XX WPI; 2004-238627/22.

XX Immunomodulatory composition useful for modulating immune responses in
 CC individuals, comprises immunomodulatory particles or a particulate
 CC composition made by mixing cationic condensing agent and an
 CC immunomodulatory compound.

XX Disclosure; SEQ ID NO 10; 90pp; English.

XX The present sequence is that of an immunomodulatory compound (IMC) that
 CC can be used in novel immunomodulatory compositions of the invention. The
 CC IMC may contain modifications of the 3'OH or 5'OH group, the nucleotide
 CC base, the sugar component and phosphate group. Novel immunomodulatory
 CC compositions of the invention comprise a cationic condensing agent, an
 CC IMC comprising the nucleotide sequence 5'-CG-3', and a stabilising agent.
 CC The compositions form particles which have increased immunomodulatory
 CC activity as compared to IMCs not formulated in the compositions of the
 CC invention. The immunomodulatory compositions can be used for
 CC immunomodulation of an individual, e.g. when the individual suffers from
 CC a disorder associated with a Th2-type immune response (e.g. allergies or
 CC allergy-induced asthma), is receiving vaccines such as therapeutic
 CC vaccines (e.g. vaccines comprising an allergy epitope, a mycobacterial

CC epitope or a tumour associated epitope) or prophylactic vaccines, suffers
 CC from cancer, suffers from an infectious disease or is at risk of exposure
 CC to an infectious agent.

XX
 SQ Sequence 10 BP; 2 A; 3 C; 3 G; 1 T; 1 U; 0 Other;

Query Match 68.0%; Score 6.8; DB 12; Length 10;
 Best Local Similarity 66.7%; Pred. No. 2e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

OY 2 DANCCKTCG 10
 :|||:||||
 Db 9 GAACGTCG 1

RESULT 48

ADK67584
 ID ADK67584 standard; DNA; 10 BP.

XX
 AC ADK67584;

XX
 DT 06-MAY-2004 (first entry)

XX Immunostimulant oligonucleotide used in immunomodulatory composition.

XX Immunomodulator; immunostimulant; vaccine; ss.

XX Synthetic.

XX WO2004014322-A2.

XX 19-FEB-2004.

XX 12-AUG-2003; 2003WO-US025415.

XX 12-AUG-2002; 2002US-0402968P.

XX (DYNA-) DYNAVAX TECHNOLOGIES CORP.

XX Van Nest G, Tuck S;

XX WPI; 2004-238627/22.

XX Immunomodulatory composition useful for modulating immune responses in
 CC individuals, comprises immunomodulatory particles or a particulate
 CC composition made by mixing cationic condensing agent and an
 CC immunomodulatory compound.

XX Disclosure; SEQ ID NO 14; 90pp; English.

XX The present sequence is that of an immunomodulatory compound (IMC) that
 CC can be used in novel immunomodulatory compositions of the invention. The
 CC IMC may contain modifications of the 3'OH or 5'OH group, the nucleotide
 CC base, the sugar component and phosphate group. Novel immunomodulatory
 CC compositions of the invention comprise a cationic condensing agent, an
 CC IMC comprising the nucleotide sequence 5'-CG-3', and a stabilising agent.
 CC The compositions form particles which have increased immunomodulatory
 CC activity as compared to IMCs not formulated in the compositions of the
 CC invention. The immunomodulatory compositions can be used for
 CC immunomodulation of an individual, e.g. when the individual suffers from
 CC a disorder associated with a Th2-type immune response (e.g. allergies or
 CC allergy-induced asthma), is receiving vaccines such as therapeutic
 CC vaccines (e.g. vaccines comprising an allergy epitope, a mycobacterial
 CC epitope or a tumour associated epitope) or prophylactic vaccines, suffers
 CC from cancer, suffers from an infectious disease or is at risk of exposure
 CC to an infectious agent.

XX
 SQ Sequence 10 BP; 2 A; 3 C; 3 G; 2 T; 0 U; 0 Other;

Query Match 68.0%; Score 6.8; DB 12; Length 10;
 Best Local Similarity 66.7%; Pred. No. 2e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGRKTCG 10
 : ||: |||
 Db 2 GAACGTTTCG 10

RESULT 49

ADK67584/c
 ID ADK67584 standard; DNA, 10 BP.

XX AC ADK67584;

XX DT 06-MAY-2004 (first entry)

XX DE Immunostimulant oligonucleotide used in immunomodulatory composition.

XX KW Immunomodulator; immunostimulant; vaccine; ss.

XX OS Synthetic.

XX PN WO2004014322-A2.

XX PD 19-FEB-2004.

XX PF 12-AUG-2003; 2003WO-US025415.

XX PR 12-AUG-2002; 2002US-0402968P.

XX PA (DYNA-) DYNAVAX TECHNOLOGIES CORP.

XX PI Van Nest G, Tuck S;

XX DR WPI; 2004-238627/22.

XX PT Immunomodulatory composition useful for modulating immune responses in individuals, comprises immunomodulatory particles or a particulate composition made by mixing cationic condensing agent and an immunomodulatory compound.

XX PS Disclosure; SEQ ID NO 14; 90pp; English.

XX CC The present sequence is that of an immunomodulatory compound (IMC) that can be used in novel immunomodulatory compositions of the invention. The IMC may contain modifications of the 3'OH or 5'OH group, the nucleotide base, the sugar component and phosphate group. Novel immunomodulatory compositions of the invention comprise a cationic condensing agent, an IMC comprising the nucleotide sequence 5'-CG-3', and a stabilising agent. The compositions form particles which have increased immunomodulatory activity as compared to IMCs not formulated in the compositions of the invention. The immunomodulatory compositions can be used for immunomodulation of an individual, e.g. when the individual suffers from a disorder associated with a Th2-type immune response (e.g. allergies or allergy-induced asthma), is receiving vaccines such as therapeutic vaccines (e.g. vaccines comprising an allergy epitope, a mycobacterial epitope or a tumour associated epitope) or prophylactic vaccines, suffers from cancer, suffers from an infectious disease or is at risk of exposure to an infectious agent.

XX SQ Sequence 10 BP; 2 A; 3 C; 3 G; 2 T; 0 U; 0 Other;

Query Match 68.0%; Score 6.8; DB 12; Length 10;
 Best Local Similarity 66.7%; Pred. No. 2e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGRKTCG 10
 : ||: |||
 Db 9 GAACGTTTCG 1

RESULT 50

ADK67579
 ID ADK67579 standard; DNA, 10 BP.

XX AC ADK67579;

XX DT 06-MAY-2004 (first entry)
 XX DE Immunostimulant oligonucleotide used in immunomodulatory composition.
 XX KW Immunomodulator; immunostimulant; vaccine; DNA-RNA hybrid; ss.
 XX OS Synthetic.
 XX PH Key Location/Qualifiers
 FT modified_base 5 /*tag= a
 FT /mod_base= OTHER
 FT /note= "OTHER= 5-bromocytosine"
 XX PN WO2004014322-A2.

XX PD 19-FEB-2004.

XX PF 12-AUG-2003; 2003WO-US025415.

XX PR 12-AUG-2002; 2002US-0402968P.

XX PA (DYNA-) DYNAVAX TECHNOLOGIES CORP.

XX PI Van Nest G, Tuck S;

XX DR WPI; 2004-238627/22.

XX PT Immunomodulatory composition useful for modulating immune responses in individuals, comprises immunomodulatory particles or a particulate composition made by mixing cationic condensing agent and an immunomodulatory compound.

XX PS Disclosure; SEQ ID NO 9; 90pp; English.

XX CC The present sequence is that of an immunomodulatory compound (IMC) that can be used in novel immunomodulatory compositions of the invention. The IMC may contain modifications of the 3'OH or 5'OH group, the nucleotide base, the sugar component and phosphate group. Novel immunomodulatory compositions of the invention comprise a cationic condensing agent, an IMC comprising the nucleotide sequence 5'-CG-3', and a stabilising agent. The compositions form particles which have increased immunomodulatory activity as compared to IMCs not formulated in the compositions of the invention. The immunomodulatory compositions can be used for immunomodulation of an individual, e.g. when the individual suffers from a disorder associated with a Th2-type immune response (e.g. allergies or allergy-induced asthma), is receiving vaccines such as therapeutic vaccines (e.g. vaccines comprising an allergy epitope, a mycobacterial epitope or a tumour associated epitope) or prophylactic vaccines, suffers from cancer, suffers from an infectious disease or is at risk of exposure to an infectious agent.

XX SQ Sequence 10 BP; 3 A; 2 C; 3 G; 1 T; 1 U; 0 Other;

Query Match 68.0%; Score 6.8; DB 12; Length 10;
 Best Local Similarity 66.7%; Pred. No. 2e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGRKTCG 10
 : ||: |||
 Db 2 AAACGTTTCG 10

RESULT 51

ADK67592
 ID ADK67592 standard; DNA, 10 BP.

XX AC ADK67592;

XX DT 06-MAY-2004 (first entry)

XX DE Immunostimulant oligonucleotide used in immunomodulatory composition.

XX Immunomodulator; immunostimulant; vaccine; ss.
 XX Synthetic.
 XX WO2004014322-A2.
 XX 19-FEB-2004.
 XX 12-AUG-2003; 2003WO-US025415.
 XX 12-AUG-2002; 2002US-0402968P.
 XX (DYNA-) DYNAVAX TECHNOLOGIES CORP.
 XX Van Nest G, Tuck S;
 XX WPI; 2004-238627/22.
 XX Immunomodulatory composition useful for modulating immune responses in individuals, comprises immunomodulatory particles or a particulate composition made by mixing cationic condensing agent and an immunomodulatory compound.
 XX Disclosure; SEQ ID NO 22; 90pp; English.
 XX The present sequence is that of an immunomodulatory compound (IMC) that can be used in novel immunomodulatory compositions of the invention. The IMC may contain modifications of the 3'OH or 5'OH group, the nucleotide base, the sugar component and phosphate group. Novel immunomodulatory compositions of the invention comprise a cationic condensing agent, an IMC comprising the nucleotide sequence 5'-CG-3', and a stabilising agent. The compositions form particles which have increased immunomodulatory activity as compared to IMCs not formulated in the compositions of the invention. The immunomodulatory compositions can be used for immunomodulation of an individual, e.g. when the individual suffers from a disorder associated with a Th2-type immune response (e.g. allergies or allergy-induced asthma), is receiving vaccines such as therapeutic vaccines (e.g. vaccines comprising an allergy epitope, a mycobacterial epitope or a tumour associated epitope) or prophylactic vaccines, suffers from cancer, suffers from an infectious disease or is at risk of exposure to an infectious agent.
 XX Sequence 10 BP; 2 A; 2 C; 3 G; 3 T; 0 U; 0 Other;
 SQ
 Query Match 68.0%; Score 6.8; DB 12; Length 10;
 Best Local Similarity 66.7%; Pred. No. 2e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
 QY 2 DANCCKTCG 10
 Db :|||:|
 2 GAACGTCG 10
 RESULT 52
 ADK67595
 ID ADK67595 standard; DNA; 10 BP.
 XX
 AC ADK67595;
 XX
 DT 06-MAY-2004 (first entry)
 XX
 DE Immunostimulant oligonucleotide used in immunomodulatory composition.
 XX Immunomodulator; immunostimulant; vaccine; ss.
 XX Synthetic.
 XX Key Location/Qualifiers
 FT modified_base 5 /*tag= a
 FT /mod_base= OTHER
 FT /note= "OTHER= 5-bromocytosine"

XX WO2004014322-A2.
 XX 19-FEB-2004.
 XX 12-AUG-2003; 2003WO-US025415.
 XX 12-AUG-2002; 2002US-0402968P.
 XX (DYNA-) DYNAVAX TECHNOLOGIES CORP.
 XX Van Nest G, Tuck S;
 XX WPI; 2004-238627/22.
 XX Immunomodulatory composition useful for modulating immune responses in individuals, comprises immunomodulatory particles or a particulate composition made by mixing cationic condensing agent and an immunomodulatory compound.
 XX Disclosure; SEQ ID NO 25; 90pp; English.
 XX The present sequence is that of an immunomodulatory compound (IMC) that can be used in novel immunomodulatory compositions of the invention. The IMC may contain modifications of the 3'OH or 5'OH group, the nucleotide base, the sugar component and phosphate group. Novel immunomodulatory compositions of the invention comprise a cationic condensing agent, an IMC comprising the nucleotide sequence 5'-CG-3', and a stabilising agent. The compositions form particles which have increased immunomodulatory activity as compared to IMCs not formulated in the compositions of the invention. The immunomodulatory compositions can be used for immunomodulation of an individual, e.g. when the individual suffers from a disorder associated with a Th2-type immune response (e.g. allergies or allergy-induced asthma), is receiving vaccines such as therapeutic vaccines (e.g. vaccines comprising an allergy epitope, a mycobacterial epitope or a tumour associated epitope) or prophylactic vaccines, suffers from cancer, suffers from an infectious disease or is at risk of exposure to an infectious agent.
 XX Sequence 10 BP; 2 A; 2 C; 3 G; 3 T; 0 U; 0 Other;
 SQ
 Query Match 68.0%; Score 6.8; DB 12; Length 10;
 Best Local Similarity 66.7%; Pred. No. 2e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
 QY 2 DANCCKTCG 10
 Db :|||:|
 2 GAACGTCG 10
 RESULT 53
 ADK67590/c
 ID ADK67590 standard; DNA; 10 BP.
 XX
 AC ADK67590;
 XX
 DT 06-MAY-2004 (first entry)
 XX
 DE Immunostimulant oligonucleotide 10TCG, for immunomodulatory composition.
 XX Immunomodulator; immunostimulant; vaccine; ss.
 XX Synthetic.
 XX WO2004014322-A2.
 XX 19-FEB-2004.
 XX 12-AUG-2003; 2003WO-US025415.
 XX 12-AUG-2002; 2002US-0402968P.
 XX (DYNA-) DYNAVAX TECHNOLOGIES CORP.
 XX

XX
PI Van Nest G, Tuck S;
XX
DR WPI; 2004-238627/22.
XX
PT Immunomodulatory composition useful for modulating immune responses in
XX individuals, comprises immunomodulatory particles or a particulate
PT composition made by mixing cationic condensing agent and an
PT immunomodulatory compound.
XX
PS Example 4; SEQ ID NO 20; 90pp; English.
XX
CC The present sequence is that of an immunomodulatory compound (IMC),
CC designated 10TCG, that can be used in novel immunomodulatory compositions
CC of the invention. The IMC may contain modifications of the 3'OH or 5'OH
CC group, the nucleotide base, the sugar component and phosphate group.
CC Novel immunomodulatory compositions of the invention comprise a cationic
CC condensing agent, an IMC comprising the nucleotide sequence 5'-CG-3', and
CC a stabilising agent. The compositions form particles which have increased
CC immunomodulatory activity as compared to IMCs not formulated in the
CC compositions of the invention. The immunomodulatory compositions can be
CC used for immunomodulation of an individual, e.g. when the individual
CC suffers from a disorder associated with a Th2-type immune response (e.g.
CC allergies or allergy-induced asthma), is receiving vaccines such as
CC therapeutic vaccines (e.g. vaccines comprising an allergy epitope, a
CC mycobacterial epitope or a tumour associated epitope) or prophylactic
CC vaccines, suffers from cancer, suffers from an infectious disease or is
CC at risk of exposure to an infectious agent. In an example from the
CC invention, IMC 10TCG was used to examine immunomodulation of human cells
CC with particulate compositions incorporating a panel of IMC
CC oligonucleotides.
XX
SQ Sequence 10 BP; 2 A; 3 C; 2 G; 3 T; 0 U; 0 Other;
Query Match 68.0%; Score 6.8; DB 12; Length 10;
Best Local Similarity 66.7%; Pred. No. 2e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
QY 2 DANCCKTCG 10
DB : |||:|
10 GAACGTTGC 2

RESULT 54
ADK67583
ID ADK67583 standard; DNA; 10 BP.
XX
AC ADK67583;
XX
DT 06-MAY-2004 (first entry)
DE
DE Immunostimulant oligonucleotide used in immunomodulatory composition.
XX
KW Immunomodulator; immunostimulant; vaccine; ss.
XX
OS Synthetic.
XX
XX WO2004014322-A2.
PN
XX 19-FEB-2004.
PD
XX 12-AUG-2003; 2003WO-US025415.
PF
XX 12-AUG-2002; 2002US-0402968P.
PR
XX (DYNA-) DYNAVAX TECHNOLOGIES CORP.
PA
XX Van Nest G, Tuck S;
PI
XX WPI; 2004-238627/22.
XX
PT Immunomodulatory composition useful for modulating immune responses in
PT individuals, comprises immunomodulatory particles or a particulate

PT composition made by mixing cationic condensing agent and an
PT immunomodulatory compound.
XX
PS Disclosure; SEQ ID NO 13; 90pp; English.
XX
CC The present sequence is that of an immunomodulatory compound (IMC) that
CC can be used in novel immunomodulatory compositions of the invention. The
CC IMC may contain modifications of the 3'OH or 5'OH group, the nucleotide
CC base, the sugar component and phosphate group. Novel immunomodulatory
CC compositions of the invention comprise a cationic condensing agent, an
CC IMC comprising the nucleotide sequence 5'-CG-3', and a stabilising agent.
CC The compositions form particles which have increased immunomodulatory
CC activity as compared to IMCs not formulated in the compositions of the
CC invention. The immunomodulatory compositions can be used for
CC immunomodulation of an individual, e.g. when the individual suffers from
CC a disorder associated with a Th2-type immune response (e.g. allergies or
CC allergy-induced asthma), is receiving vaccines such as therapeutic
CC vaccines (e.g. vaccines comprising an allergy epitope, a mycobacterial
CC epitope or a tumour associated epitope) or prophylactic vaccines, suffers
CC from cancer, suffers from an infectious disease or is at risk of exposure
CC to an infectious agent.
XX
SQ Sequence 10 BP; 2 A; 3 C; 2 G; 2 T; 0 U; 0 Other;
Query Match 68.0%; Score 6.8; DB 12; Length 10;
Best Local Similarity 66.7%; Pred. No. 2e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
QY 2 DANCCKTCG 10
DB : |||:|
2 AACCGTTGC 10

RESULT 55
ADQ95321
ID ADQ95321 standard; DNA; 10 BP.
XX
AC ADQ95321;
XX
DT 07-OCT-2004 (first entry)
DE
DE Branched immunomodulatory compound related oligonucleotide, SEQ ID 63.
XX
KW Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
KW Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Antitumor;
KW Gastrointestinal; Nephrotropic; branched immunomodulatory compound;
KW Immunomodulator; interferon-gamma; IFN-gamma; interferon-alpha;
KW IFN-alpha; ss.
XX
OS Synthetic.
XX
XX Key Location/Qualifiers
FH modified_base 5
FT /*tag= a
FT /mod_base= OTHER
FT /note= "c= 5-bromocytosine"
XX
XX WO2004058159-A2.
PN
XX 15-JUL-2004.
PD
XX 17-DEC-2003; 2003WO-US040417.
PF
XX 23-DEC-2002; 2002US-0436406P.
PR
XX (DYNA-) DYNAVAX TECHNOLOGIES CORP.
PA
XX Fearon KL;
PI
XX WPI; 2004-561515/54.
DR
XX

PT New branched immunomodulatory compound comprising at least three nucleic
 PT acid moieties and at least one branch-point nucleoside, useful for
 XX modulating an immune response in individual suffering e.g. allergy.

PS Disclosure; SEQ ID NO 63; 183pp; English.

XX The present invention relates to novel branched immunomodulatory
 CC compounds (BIC) comprising at least three nucleic acid moieties, at least
 CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
 CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
 CC e.g. the ability to stimulate interferon (IFN)-gamma production from
 CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
 CC alpha production from human peripheral blood mononuclear cells and the
 CC ability to stimulate B cell proliferation. The BIC compounds are useful
 CC for modulating an immune response in an individual suffering from a
 CC disorder associated with a T helper (Th)2-type immune response e.g.
 CC allergy, allergy-induced asthma or an infectious disease; for increasing
 CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
 CC are also useful for immunomodulation of cells and individuals; in the
 CC fields of biomedicine and immunology; for the manufacture of a medicament
 CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
 CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
 CC ameliorating an IgE-related disorder in an individual. The disorders
 CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
 CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
 CC cancer; infectious disease resistant to humoral immune responses (e.g.
 CC diseases caused by mycobacterial infections and intracellular pathogens,
 CC cellular pathogens e.g. bacteria or protozoans or by subcellular
 CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
 CC leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases
 CC caused by intracellular parasites such as malaria; leishmaniasis,
 CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
 CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
 CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
 CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.

XX Sequence 10 BP; 2 A; 3 C; 3 G; 2 T; 0 U; 0 Other;

Query Match 68.0%; Score 6.8; DB 12; Length 10;
 Best Local Similarity 66.7%; Pred. No. 2e+05; Indels 0; Gaps 0;
 Matches 6; Conservative 2; Mismatches 1;

QY 2 DANCGRKTCG 10

Db 2 GAACGTTTCG 10

RESULT 56

ID ADQ95321/C

XX ADQ95321 standard; DNA; 10 BP.

AC ADQ95321;

XX 07-OCT-2004 (first entry)

XX Branched immunomodulatory compound related oligonucleotide, SEQ ID 63.

KW Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
 KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
 KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
 KW Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Antiulcer;
 KW Gastrointestinal; Nephrotropic; branched immunomodulatory compound;
 KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
 KW IFN-alpha; ss.

XX Synthetic.

XX Key Location/Qualifiers

FT modified_base 5

FT /*tag= a

FT /mod_base= OTHER

FT /note= "C= 5-bromocytosine"

XX WO2004058159-A2.

XX 15-JUL-2004.

XX 17-DEC-2003; 2003WO-US040417.

XX 23-DEC-2002; 2002US-0436406P.

XX (DYNA-) DYNAVAX TECHNOLOGIES CORP.

XX Fearon KL;

XX WPI; 2004-561515/54.

XX New branched immunomodulatory compound comprising at least three nucleic
 PT acid moieties and at least one branch-point nucleoside, useful for
 PT modulating an immune response in individual suffering e.g. allergy.

XX Disclosure; SEQ ID NO 63; 183pp; English.

XX The present invention relates to novel branched immunomodulatory
 CC compounds (BIC) comprising at least three nucleic acid moieties, at least
 CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
 CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
 CC e.g. the ability to stimulate interferon (IFN)-gamma production from
 CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
 CC alpha production from human peripheral blood mononuclear cells and the
 CC ability to stimulate B cell proliferation. The BIC compounds are useful
 CC for modulating an immune response in an individual suffering from a
 CC disorder associated with a T helper (Th)2-type immune response e.g.
 CC allergy, allergy-induced asthma or an infectious disease; for increasing
 CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
 CC are also useful for immunomodulation of cells and individuals; in the
 CC fields of biomedicine and immunology; for the manufacture of a medicament
 CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
 CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
 CC ameliorating an IgE-related disorder in an individual. The disorders
 CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
 CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
 CC cancer; infectious disease resistant to humoral immune responses (e.g.
 CC diseases caused by mycobacterial infections and intracellular pathogens,
 CC cellular pathogens e.g. bacteria or protozoans or by subcellular
 CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
 CC leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases
 CC caused by intracellular parasites such as malaria; leishmaniasis,
 CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
 CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
 CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
 CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.

XX Sequence 10 BP; 2 A; 3 C; 3 G; 2 T; 0 U; 0 Other;

Query Match 68.0%; Score 6.8; DB 12; Length 10;

Best Local Similarity 66.7%; Pred. No. 2e+05;

Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGRKTCG 10

Db 9 GAACGTTTCG 1

RESULT 57

ID ADQ95322

XX ADQ95322 standard; DNA; 10 BP.

AC ADQ95322;

XX 07-OCT-2004 (first entry)

XX Branched immunomodulatory compound related oligonucleotide, SEQ ID 64.

CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
 CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
 CC ameliorating an IGE-related disorder in an individual. The disorders
 CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
 CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
 CC cancer; infectious disease resistant to humoral immune responses (e.g.
 CC diseases caused by mycobacterial infections and intracellular pathogens,
 CC cellular pathogens e.g. bacteria or protozoans or by subcellular
 CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
 CC leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases
 CC caused by intracellular parasites such as malaria; leishmaniasis,
 CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
 CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
 CC induced-fibrosis, hepatic fibrosis including schistosomiasis-induced
 CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.
 XX
 SQ Sequence 10 BP; 2 A; 3 C; 3 G; 2 T; 0 U; 0 Other;
 Query Match 68.0%; Score 6.8; DB 12; Length 10;
 Best Local Similarity 66.7%; Pred. No. 2e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
 QY 2 DANGKTCG 10
 Db : |||||
 9 GAACGTCG 1
 RESULT 59
 ADQ95323
 ID ADQ95323 standard; DNA; 10 BP.
 XX
 AC ADQ95323;
 XX
 DT 07-OCT-2004 (first entry)
 XX
 DE Branched immunomodulatory compound related oligonucleotide, SEQ ID 65.
 XX
 KW Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
 KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
 KW Dermatologic; Immunosuppressive; Cytostatic; Protozoacide; Antitumor;
 KW Tuberculostatic; Antileptotic; Antiparasitic; Antimalarial; Antiulcer;
 KW Gastrointestinal; Nephrotropic; branched immunomodulatory compound;
 KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
 KW IFN-alpha; ss.
 XX
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT modified_base 1 /*tag= a
 FT /mod_base= OTHER
 FT /note= "c= 5-bromocytosine"
 FT modified_base 5
 FT /*tag= b
 FT /mod_base= OTHER
 FT /note= "c= 5-bromocytosine"
 XX
 PN W02004058159-A2.
 XX
 XX 15-JUL-2004.
 XX
 XX 17-DEC-2003; 2003WO-US040417.
 XX
 XX 23-DEC-2002; 2002US-0436406P.
 XX
 PA (DYNA-) DYNAXVAX TECHNOLOGIES CORP.
 XX
 PI Fearon KL;
 XX
 XX WPI; 2004-561515/54.
 XX
 PT New branched immunomodulatory compound comprising at least three nucleic

PT acid moieties and at least one branch-point nucleoside, useful for
 PT modulating an immune response in individual suffering e.g. allergy.
 XX
 PS Disclosure; SEQ ID NO 65; 183pp; English.
 XX
 CC The present invention relates to novel branched immunomodulatory
 CC compounds (BIC) comprising at least three nucleic acid moieties, at least
 CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
 CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
 CC e.g. the ability to stimulate interferon (IFN)-gamma production from
 CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
 CC alpha production from human peripheral blood mononuclear cells and the
 CC ability to stimulate B cell proliferation. The BIC compounds are useful
 CC for modulating an immune response in an individual suffering from a
 CC disorder associated with a T helper (Th)2-type immune response e.g.
 CC allergy, allergy-induced asthma or an infectious disease; for increasing
 CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
 CC are also useful for immunomodulation of cells and individuals; in the
 CC fields of biomedicine and immunology; for the manufacture of a medicament
 CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
 CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
 CC ameliorating an IGE-related disorder in an individual. The disorders
 CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
 CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
 CC cancer; infectious disease resistant to humoral immune responses (e.g.
 CC diseases caused by mycobacterial infections and intracellular pathogens,
 CC cellular pathogens e.g. bacteria or protozoans or by subcellular
 CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
 CC leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases
 CC caused by intracellular parasites such as malaria; leishmaniasis,
 CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
 CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
 CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
 CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.
 XX
 SQ Sequence 10 BP; 2 A; 3 C; 3 G; 1 T; 1 U; 0 Other;
 Query Match 68.0%; Score 6.8; DB 12; Length 10;
 Best Local Similarity 66.7%; Pred. No. 2e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
 QY 2 DANGKTCG 10
 Db : |||||
 2 GAACGTCG 10
 RESULT 60
 ADQ95323/c
 ID ADQ95323 standard; DNA; 10 BP.
 XX
 AC ADQ95323;
 XX
 DT 07-OCT-2004 (first entry)
 XX
 DE Branched immunomodulatory compound related oligonucleotide, SEQ ID 65.
 XX
 KW Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
 KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
 KW Dermatologic; Immunosuppressive; Cytostatic; Protozoacide;
 KW Tuberculostatic; Antileptotic; Antiparasitic; Antimalarial; Antiulcer;
 KW Gastrointestinal; Nephrotropic; branched immunomodulatory compound;
 KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
 KW IFN-alpha; ss.
 XX
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT modified_base 1 /*tag= a
 FT /mod_base= OTHER
 FT /note= "c= 5-bromocytosine"
 FT modified_base 5

RESULT 62

ADQ95271
ID ADQ95271 standard; DNA; 10 BP.

AC ADQ95271;

XX 07-OCT-2004 (first entry)

XX Branched immunomodulatory compound related oligonucleotide, SEQ ID 13.

XX Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
XX Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
XX Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
XX Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Antiulcer;
XX Gastrointestinal; Nephrotropic; branched immunomodulatory compound;
XX immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
XX IFN-alpha; ss.

OS Synthetic.

XX WO2004058159-A2.

XX 15-JUL-2004.

XX 17-DEC-2003; 2003WO-US040417.

XX 23-DEC-2002; 2002US-0436406P.

XX (DYNA-) DYNAXV TECHNOLOGIES CORP.

XX Fearon KL;

XX WPI; 2004-561515/54.

XX New branched immunomodulatory compound comprising at least three nucleic
XX acid moieties and at least one branch-point nucleoside, useful for
XX modulating an immune response in individual suffering e.g. allergy.

XX Disclosure; SEQ ID NO 13; 183pp; English.

XX The present invention relates to novel branched immunomodulatory
XX compounds (BIC) comprising at least three nucleic acid moieties, at least
XX one of which comprises the nucleotide sequence 5'-CG-3', and at least one
XX branch-point nucleoside. The BIC compounds has immunomodulatory activity
XX e.g. the ability to stimulate interferon (IFN)-gamma production from
XX human peripheral blood mononuclear cells, the ability to stimulate IFN-
XX alpha production from human peripheral blood mononuclear cells and the
XX ability to stimulate B cell proliferation. The BIC compounds are useful
XX for modulating an immune response in an individual suffering from a
XX disorder associated with a T helper (Th) 2-type immune response e.g.
XX allergy, allergy-induced asthma or an infectious disease; for increasing
XX secretion of IFN-gamma by blood cells in an individual. The BIC compounds
XX are also useful for immunomodulation of cells and individuals; in the
XX fields of biomedicine and immunology; for the manufacture of a medicament
XX ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
XX hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
XX ameliorating an Ige-related disorder in an individual. The disorders
XX includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
XX eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
XX cancer; infectious disease resistant to humoral immune responses (e.g.
XX diseases caused by mycobacterial infections and intracellular pathogens,
XX cellular pathogens e.g. bacteria or protozoans or by subcellular
XX pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
XX leprosy or M. marinum or M. ulcerans infections; herpes viruses; diseases
XX caused by intracellular parasites such as malaria; leishmaniasis,
XX toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
XX disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
XX induced fibrosis, hepatic fibrosis including schistosomiasis-induced
XX hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
XX the BIC compounds of the invention.

SQ Sequence 10 BP; 1 A; 2 C; 4 G; 3 T; 0 U; 0 Other;

Query Match 68.0%; Score 6.8; DB 12; Length 10;
Best Local Similarity 66.7%; Pred. No. 2e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGRCTCG 10

DB 2 TATCGGTCG 10

RESULT 63

ADQ95318
ID ADQ95318 standard; DNA; 10 BP.

XX ADQ95318;

DT 07-OCT-2004 (first entry)

XX Branched immunomodulatory compound related oligonucleotide, SEQ ID 60.

XX Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
XX Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
XX Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
XX Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Antiulcer;
XX Gastrointestinal; Nephrotropic; branched immunomodulatory compound;
XX immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
XX IFN-alpha; ss.

OS Synthetic.

XX Key Location/Qualifiers
FH modified_base 5

FT /*tag= a

/mod_base= OTHER

FT /notes= "C= 5-bromocytosine"

XX WO2004058159-A2.

XX 15-JUL-2004.

XX 17-DEC-2003; 2003WO-US040417.

XX 23-DEC-2002; 2002US-0436406P.

XX (DYNA-) DYNAXV TECHNOLOGIES CORP.

XX Fearon KL;

XX WPI; 2004-561515/54.

XX New branched immunomodulatory compound comprising at least three nucleic
XX acid moieties and at least one branch-point nucleoside, useful for
XX modulating an immune response in individual suffering e.g. allergy.

XX Disclosure; SEQ ID NO 60; 183pp; English.

XX The present invention relates to novel branched immunomodulatory
XX compounds (BIC) comprising at least three nucleic acid moieties, at least
XX one of which comprises the nucleotide sequence 5'-CG-3', and at least one
XX branch-point nucleoside. The BIC compounds has immunomodulatory activity
XX e.g. the ability to stimulate interferon (IFN)-gamma production from
XX human peripheral blood mononuclear cells, the ability to stimulate IFN-
XX alpha production from human peripheral blood mononuclear cells and the
XX ability to stimulate B cell proliferation. The BIC compounds are useful
XX for modulating an immune response in an individual suffering from a
XX disorder associated with a T helper (Th) 2-type immune response e.g.
XX allergy, allergy-induced asthma or an infectious disease; for increasing
XX secretion of IFN-gamma by blood cells in an individual. The BIC compounds
XX are also useful for immunomodulation of cells and individuals; in the
XX fields of biomedicine and immunology; for the manufacture of a medicament
XX ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
XX hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for

CC ameliorating an IGE-related disorder in an individual. The disorders
 CC eosinophilic dermatitis, eosinophilic gastrointestinal inflammation,
 CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
 CC cancer; infectious disease resistant to humoral immune responses (e.g.
 CC diseases caused by mycobacterial infections and intracellular pathogens,
 CC cellular pathogens e.g. bacteria or protozoans or by subcellular
 CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
 CC leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases
 CC caused by intracellular parasites such as malaria; leishmaniasis,
 CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
 CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
 CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
 CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.
 XX
 SQ Sequence 10 BP; 2 A; 3 C; 3 G; 2 T; 0 U; 0 Other;
 Query Match 68.0%; Score 6.8; DB 12; Length 10;
 Best Local Similarity 66.7%; Pred. No. 2e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
 QY 2 DANCGTCTG 10
 Db 2 AACCGTTCG 10
 RESULT 64
 ADQ95320
 ID ADQ95320 standard; DNA; 10 BP.
 AC ADQ95320;
 XX
 XX 07-OCT-2004 (first entry)
 DE Branched immunomodulatory compound related oligonucleotide, SEQ ID 62.
 XX
 KW Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
 KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
 KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
 KW Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Antitumor;
 KW Gastrointestinal; Nephrotropic; branched immunomodulatory compound;
 KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
 KW IFN-alpha; ss.
 XX
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT modified_base 1 /*tag= a
 FT /mod_base= OTHER
 FT modified_base 5 /*tag= b
 FT /mod_base= OTHER
 FT modified_base 5 /*tag= b
 FT /mod_base= OTHER
 XX
 XX WO2004058159-A2.
 XX
 XX 15-JUL-2004.
 XX
 XX 17-DEC-2003; 2003WO-US040417.
 XX
 XX 23-DEC-2002; 2002US-0436406P.
 XX
 XX (DYNA-) DYNAXX TECHNOLOGIES CORP.
 XX
 XX Fearon KL;
 XX
 XX WPI; 2004-561515/54.
 XX
 XX New branched immunomodulatory compound comprising at least three nucleic
 XX acid moieties and at least one branch-point nucleoside, useful for
 XX modulating an immune response in individual suffering e.g. allergy.

XX Disclosure; SEQ ID NO 62; 183pp; English.
 XX
 CC The present invention relates to novel branched immunomodulatory
 CC compounds (BIC) comprising at least three nucleic acid moieties, at least
 CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
 CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
 CC e.g. the ability to stimulate interferon (IFN)-gamma production from
 CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
 CC alpha production from human peripheral blood mononuclear cells and the
 CC ability to stimulate B cell proliferation. The BIC compounds are useful
 CC for modulating an immune response in an individual suffering from a
 CC disorder associated with a T helper (Th)2-type immune response e.g.
 CC allergy, allergy-induced asthma or an infectious disease; for increasing
 CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
 CC are also useful for immunomodulation of cells and individuals; in the
 CC fields of biomedicine and immunology; for the manufacture of a medicament
 CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
 CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
 CC ameliorating an IGE-related disorder in an individual. The disorders
 CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
 CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
 CC cancer; infectious disease resistant to humoral immune responses (e.g.
 CC diseases caused by mycobacterial infections and intracellular pathogens,
 CC cellular pathogens e.g. bacteria or protozoans or by subcellular
 CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
 CC leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases
 CC caused by intracellular parasites such as malaria; leishmaniasis,
 CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
 CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
 CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
 CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.
 XX
 SQ Sequence 10 BP; 1 A; 4 C; 3 G; 2 T; 0 U; 0 Other;
 Query Match 68.0%; Score 6.8; DB 12; Length 10;
 Best Local Similarity 66.7%; Pred. No. 2e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
 QY 2 DANCGTCTG 10
 Db 2 AACCGTTCG 10
 RESULT 65
 ADQ95320/c
 ID ADQ95320 standard; DNA; 10 BP.
 AC ADQ95320;
 XX
 XX 07-OCT-2004 (first entry)
 DE Branched immunomodulatory compound related oligonucleotide, SEQ ID 62.
 XX
 KW Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
 KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
 KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
 KW Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Antitumor;
 KW Gastrointestinal; Nephrotropic; branched immunomodulatory compound;
 KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
 KW IFN-alpha; ss.
 XX
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT modified_base 1 /*tag= a
 FT /mod_base= OTHER
 FT modified_base 5 /*tag= b
 FT /mod_base= OTHER
 FT modified_base 5 /*tag= b
 FT /mod_base= OTHER
 XX
 XX WO2004058159-A2.
 XX
 XX 15-JUL-2004.
 XX
 XX 17-DEC-2003; 2003WO-US040417.
 XX
 XX 23-DEC-2002; 2002US-0436406P.
 XX
 XX (DYNA-) DYNAXX TECHNOLOGIES CORP.
 XX
 XX Fearon KL;
 XX
 XX WPI; 2004-561515/54.
 XX
 XX New branched immunomodulatory compound comprising at least three nucleic
 XX acid moieties and at least one branch-point nucleoside, useful for
 XX modulating an immune response in individual suffering e.g. allergy.

FT XX /note= "c= 5-bromocytosine"

PN KW WO2004058159-A2.

XX KW 15-JUL-2004.

PD KW 17-DEC-2003; 2003WO-US040417.

XX KW 23-DEC-2002; 2002US-0436406P.

XX XX (DYNA-) DYNAXX TECHNOLOGIES CORP.

PA Fearon KL;

XX WPI; 2004-561515/54.

DR XX New branched immunomodulatory compound comprising at least three nucleic acid moieties and at least one branch-point nucleoside, useful for modulating an immune response in individual suffering e.g. allergy.

XX PS Disclosure; SEQ ID NO 62; 183pp; English.

XX CC The present invention relates to novel branched immunomodulatory compounds (BIC) comprising at least three nucleic acid moieties, at least one of which comprises the nucleotide sequence 5'-CG-3', and at least one branch-point nucleoside. The BIC compounds has immunomodulatory activity e.g. the ability to stimulate interferon (IFN)-gamma production from human peripheral blood mononuclear cells, the ability to stimulate IFN-alpha production from human peripheral blood mononuclear cells and the ability to stimulate B cell proliferation. The BIC compounds are useful for modulating an immune response in an individual suffering from a disorder associated with a T helper (Th)2-type immune response e.g. allergy, allergy-induced asthma or an infectious disease; for increasing secretion of IFN-gamma by blood cells in an individual. The BIC compounds are also useful for immunomodulation of cells and individuals; in the fields of biomedicine and immunology; for the manufacture of a medicament; for treating idiopathic pulmonary fibrosis, viral infection (e.g. hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for ameliorating an IGE-related disorder in an individual. The disorders includes atopic dermatitis, eosinophilic gastrointestinal inflammation, eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis; cancer; infectious disease resistant to humoral immune responses (e.g. diseases caused by mycobacterial infections and intracellular pathogens, cellular pathogens e.g. bacteria or protozoans or by subcellular pathogens e.g. viruses); mycobacterial diseases such as tuberculosis, leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases caused by intracellular parasites such as malaria; leishmaniasis, toxoplasmosis; parasitic colitis; scleroderma, cutaneous radiation-induced fibrosis, hepatic fibrosis including schistosomiasis-induced hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in the BIC compounds of the invention.

XX SQ Sequence 10 BP; 1 A; 4 C; 3 G; 2 T; 0 U; 0 Other;

Query Match 68.0%; Score 6.8; DB 12; Length 10;
Best Local Similarity 66.7%; Pred. No. 2e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTGC 10
: |||:|

Db 9 GAACGGTGC 1

RESULT 66

ADQ95273

ID ADQ95273 standard; DNA; 10 BP.

AC ADQ95273;

XX 07-OCT-2004 (first entry)

DT

XX Branched immunomodulatory compound related oligonucleotide, SEQ ID 15.

XX KW Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory; Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;

KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;

KW Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Antitumor;

KW Gastrointestinal; Nephrotropic; branched immunomodulatory compound; immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;

KW IFN-alpha; ss.

XX Synthetic.

XX WO2004058159-A2.

XX 15-JUL-2004.

PD 17-DEC-2003; 2003WO-US040417.

XX 23-DEC-2002; 2002US-0436406P.

XX XX (DYNA-) DYNAXX TECHNOLOGIES CORP.

PA Fearon KL;

XX WPI; 2004-561515/54.

DR XX New branched immunomodulatory compound comprising at least three nucleic acid moieties and at least one branch-point nucleoside, useful for modulating an immune response in individual suffering e.g. allergy.

XX PS Disclosure; SEQ ID NO 15; 183pp; English.

XX CC The present invention relates to novel branched immunomodulatory compounds (BIC) comprising at least three nucleic acid moieties, at least one of which comprises the nucleotide sequence 5'-CG-3', and at least one branch-point nucleoside. The BIC compounds has immunomodulatory activity e.g. the ability to stimulate interferon (IFN)-gamma production from human peripheral blood mononuclear cells, the ability to stimulate IFN-alpha production from human peripheral blood mononuclear cells and the ability to stimulate B cell proliferation. The BIC compounds are useful for modulating an immune response in an individual suffering from a disorder associated with a T helper (Th)2-type immune response e.g. allergy, allergy-induced asthma or an infectious disease; for increasing secretion of IFN-gamma by blood cells in an individual. The BIC compounds are also useful for immunomodulation of cells and individuals; in the fields of biomedicine and immunology; for the manufacture of a medicament; for treating idiopathic pulmonary fibrosis, viral infection (e.g. hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for ameliorating an IGE-related disorder in an individual. The disorders includes atopic dermatitis, eosinophilic gastrointestinal inflammation, eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis; cancer; infectious disease resistant to humoral immune responses (e.g. diseases caused by mycobacterial infections and intracellular pathogens, cellular pathogens e.g. bacteria or protozoans or by subcellular pathogens e.g. viruses); mycobacterial diseases such as tuberculosis, leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases caused by intracellular parasites such as malaria; leishmaniasis, toxoplasmosis; parasitic colitis; scleroderma, cutaneous radiation-induced fibrosis, hepatic fibrosis including schistosomiasis-induced hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in the BIC compounds of the invention.

XX SQ Sequence 10 BP; 2 A; 3 C; 3 G; 2 T; 0 U; 0 Other;

Query Match 68.0%; Score 6.8; DB 12; Length 10;
Best Local Similarity 66.7%; Pred. No. 2e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTGC 10
: |||:|

Db 2 AACCGTGC 10

CC	induced fibrosis, hepatic fibrosis including schistosomiasis-induced
CC	hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
CC	the BIC compounds of the invention.
XX	
SQ	Sequence 10 BP; 2 A; 3 C; 3 G; 2 T; 0 U; 0 Other;
	Query Match 68.0%; Score 6.8; DB 12; Length 10;
	Best Local Similarity 66.7%; Pred. No. 2e+05;
	Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
Qy	2 DANGCKTCG 10 :
Db	2 GAACGTTCG 10
RESULT 68	
ADQ95277/C	
ID	ADQ95277 standard; DNA; 10 BP.
XX	
AC	ADQ95277;
XX	
DT	07-OCT-2004 (first entry)
XX	
DE	Branched immunomodulatory compound related oligonucleotide, SEQ ID 19.
XX	
KW	Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
KW	Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
KW	Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
KW	Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Antitumor;
KW	Gastrointestinal; Nephrotropic; Branched immunomodulatory compound;
KW	immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
XX	IFN-alpha; ss.
OS	Synthetic.
XX	
FH	Key Location/Qualifiers
FT	modified_base 1
FT	/tag= a
FT	/mod_base= OTHER
FT	/note= "C= 5-bromocytosine"
XX	
FN	WO2004058159-A2.
XX	
PD	15-JUL-2004.
XX	
DP	17-DEC-2003; 2003WO-US040417.
XX	
PR	23-DEC-2002; 2002US-0436406P.
XX	
PA	(DYNA-) DYNAVAX TECHNOLOGIES CORP.
XX	
PI	Fearon KL;
XX	
DR	WPT; 2004-561515/54.
XX	
PT	New branched immunomodulatory compound comprising at least three nucleic
PT	acid moieties and at least one branch-point nucleoside, useful for
PT	modulating an immune response in individual suffering e.g. allergy.
XX	
PS	Disclosure; SEQ ID NO 19; 183pp; English.
XX	
CC	The present invention relates to novel branched immunomodulatory
CC	compounds (BIC) comprising at least three nucleic acid moieties, at least
CC	one of which comprises the nucleotide sequence 5'-CG-3', and at least one
CC	branch-point nucleoside. The BIC compounds has immunomodulatory activity
CC	e.g. the ability to stimulate interferon (IFN)-gamma production from
CC	human peripheral blood mononuclear cells, the ability to stimulate IFN-
CC	alpha production from human peripheral blood mononuclear cells and the
CC	ability to stimulate B cell proliferation. The BIC compounds are useful
CC	for modulating an immune response in an individual suffering from a
CC	disorder associated with a T helper (Th)2-type immune response e.g.
CC	allergy, allergy-induced asthma or an infectious disease; for increasing
CC	secretion of IFN-gamma by blood cells in an individual. The BIC compounds

are also useful for immunomodulation of cells and individuals; in the fields of biomedicine and immunology; for the manufacture of a medicament; for treating idiopathic pulmonary fibrosis, viral infection (e.g. hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for ameliorating an IGE-related disorder in an individual. The disorders includes atopic dermatitis, eosinophilic gastrointestinal inflammation, eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis; cancer; infectious disease resistant to humoral immune responses (e.g. diseases caused by mycobacterial infections and intracellular pathogens, cellular pathogens e.g. bacteria or protozoans or by subcellular pathogens e.g. viruses); mycobacterial diseases such as tuberculosis, leprosy or M. marinum or M. ulcerans infections; herpes viruses; diseases caused by intracellular parasites such as malaria; leishmaniasis, toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-induced fibrosis, hepatic fibrosis including schistosomiasis-induced hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in the BIC compounds of the invention.

XX SQ Sequence 10 BP; 2 A; 3 C; 3 G; 2 T; 0 U; 0 Other;

Query Match 68.0%; Score 6.8; DB 12; Length 10;

Best Local Similarity 66.7%; Pred. No. 2e+05; Mismatches 2; Indels 1; Gaps 0;

Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10

DB 9 GAACGCTCG 1

RESULT 69

ADQ95262

ID ADQ95262 standard; DNA; 10 BP.

AC ADQ95262;

DT 07-OCT-2004 (first entry)

DE Branched immunomodulatory compound related oligonucleotide, SEQ ID 4.

XX Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory; Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory; Dermatological; Immunosuppressive; Cytostatic; Protozoacide; Tuberculosstatic; Antileprotic; Antiparasitic; Antimalarial; Antiulcer; Gastrointestinal; Nephrotropic; branched immunomodulatory compound; immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha; IFN-alpha; ss.

XX Synthetic.

XX Key Location/Qualifiers

FT modified_base 1

FT /*tag= a

FT /mod_base= OTHER

FT /note= "n= T, G, C or 5-bromocytosine"

XX WO2004058159-A2.

XX PN 15-JUL-2004.

XX PD 17-DEC-2003; 2003WO-US040417.

XX PF 23-DEC-2002; 2002US-0436406P.

XX PR (DYNA-) DYNAX TECHNOLOGIES CORP.

XX PA Fearon KL;

XX PI WPI; 2004-561515/54.

XX DR New branched immunomodulatory compound comprising at least three nucleic acid moieties and at least one branch-point nucleoside, useful for

XX PT modulating an immune response in individual suffering e.g. allergy.

XX

XX Disclosure; SEQ ID NO 4; 183pp; English.

XX

CC The present invention relates to novel branched immunomodulatory compounds (BIC) comprising at least three nucleic acid moieties, at least one of which comprises the nucleotide sequence 5'-CG-3', and at least one branch-point nucleoside. The BIC compounds has immunomodulatory activity e.g. the ability to stimulate interferon (IFN)-gamma production from human peripheral blood mononuclear cells, the ability to stimulate IFN-alpha production from human peripheral blood mononuclear cells and the ability to stimulate B cell proliferation. The BIC compounds are useful for modulating an immune response in an individual suffering from a disorder associated with a T helper (Th) 2-type immune response e.g. allergy, allergy-induced asthma or an infectious disease; for increasing secretion of IFN-gamma by blood cells in an individual. The BIC compounds are also useful for immunomodulation of cells and individuals; in the fields of biomedicine and immunology; for the manufacture of a medicament; for treating idiopathic pulmonary fibrosis, viral infection (e.g. hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for ameliorating an IGE-related disorder in an individual. The disorders includes atopic dermatitis, eosinophilic gastrointestinal inflammation, eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis; cancer; infectious disease resistant to humoral immune responses (e.g. diseases caused by mycobacterial infections and intracellular pathogens, cellular pathogens e.g. bacteria or protozoans or by subcellular pathogens e.g. viruses); mycobacterial diseases such as tuberculosis, leprosy or M. marinum or M. ulcerans infections; herpes viruses; diseases caused by intracellular parasites such as malaria; leishmaniasis, toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-induced fibrosis, hepatic fibrosis including schistosomiasis-induced hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in the BIC compounds of the invention.

CC Sequence 10 BP; 1 A; 2 C; 2 G; 1 T; 0 U; 4 Other;

CC Query Match 68.0%; Score 6.8; DB 12; Length 10;

Best Local Similarity 88.9%; Pred. No. 2e+05;

Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10

DB 2 DAHCKGCTCG 10

RESULT 70

ADQ95278

ID ADQ95278 standard; DNA; 10 BP.

AC ADQ95278;

DT 07-OCT-2004 (first entry)

DE Branched immunomodulatory compound related oligonucleotide, SEQ ID 20.

XX Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory; Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory; Dermatological; Immunosuppressive; Cytostatic; Protozoacide; Tuberculosstatic; Antileprotic; Antiparasitic; Antimalarial; Antiulcer; Gastrointestinal; Nephrotropic; branched immunomodulatory compound; immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha; IFN-alpha; ss.

XX Synthetic.

XX WO2004058159-A2.

XX PN 15-JUL-2004.

XX PD 17-DEC-2003; 2003WO-US040417.

XX PF 23-DEC-2002; 2002US-0436406P.

XX PR

PA (DYNA-) DYNAXVAX TECHNOLOGIES CORP.

XX Fearon KL;

XX WPI; 2004-561515/54.

XX New branched immunomodulatory compound comprising at least three nucleic
PT acid moieties and at least one branch-point nucleoside, useful for
PT modulating an immune response in individual suffering e.g. allergy.

XX Disclosure; SEQ ID NO 20; 183pp; English.

XX The present invention relates to novel branched immunomodulatory
CC compounds (BIC) comprising at least three nucleic acid moieties, at least
CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
CC e.g. the ability to stimulate interferon (IFN)-gamma production from
CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
CC alpha production from human peripheral blood mononuclear cells and the
CC ability to stimulate B cell proliferation. The BIC compounds are useful
CC for modulating an immune response in an individual suffering from a
CC disorder associated with a T helper (Th)2-type immune response e.g.
CC allergy, allergy-induced asthma or an infectious disease; for increasing
CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
CC are also useful for immunomodulation of cells and individuals; in the
CC fields of biomedicine and immunology; for the manufacture of a medicament
CC for treating idiopathic pulmonary fibrosis, viral infection (e.g.
CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
CC ameliorating an IGE-related disorder in an individual. The disorders
CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
CC cancer; infectious disease resistant to humoral immune responses (e.g.
CC diseases caused by mycobacterial infections and intracellular pathogens,
CC cellular pathogens e.g. bacteria or protozoans or by subcellular
CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
CC leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases
CC caused by intracellular parasites such as malaria; leishmaniasis,
CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
CC the BIC compounds of the invention.

XX Sequence 10 BP; 2 A; 2 C; 2 G; 3 T; 1 U; 0 Other;

Query Match 68.0%; Score 6.8; DB 12; Length 10;

Best Local Similarity 66.7%; Pred. No. 2e+05;

Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGKTCG 10

DB 2 TACGUTCG 10

RESULT 71

ADQ95311

ID ADQ95311 standard; DNA; 10 BP.

XX ADQ95311;

XX 07-OCT-2004 (first entry)

XX Branched immunomodulatory compound related oligonucleotide, SEQ ID 53.

XX Antiallergic; Antiasthmatic; Antibacterial; Immunomodulatory; Respiratory;
KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
KW Tuberculosis; Antileprotic; Antiparasitic; Antimalarial; Antitumor;
KW Gastrointestinal; Nephrotropic; branched immunomodulatory compound;
KW Immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
KW IFN-alpha; ss.
XX Synthetic.

XX Key Location/Qualifiers
FH modified_base 1
FT /*tag= a
FT /mod_base= OTHER

FT /note= "n= T, G, C or 5-bromocytosine"

FT modified_base 5

FT /*tag= b

FT /mod_base= OTHER

FT /note= "c= 5-bromocytosine"

XX WO2004058159-A2.

XX 15-JUL-2004.

XX 17-DEC-2003; 2003WO-US040417.

XX 23-DEC-2002; 2002US-0436406P.

XX (DYNA-) DYNAXVAX TECHNOLOGIES CORP.

XX Fearon KL;

XX WPI; 2004-561515/54.

XX New branched immunomodulatory compound comprising at least three nucleic
CC acid moieties and at least one branch-point nucleoside, useful for
CC modulating an immune response in individual suffering e.g. allergy.

XX Disclosure; SEQ ID NO 53; 183pp; English.

XX The present invention relates to novel branched immunomodulatory
CC compounds (BIC) comprising at least three nucleic acid moieties, at least
CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
CC e.g. the ability to stimulate interferon (IFN)-gamma production from
CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
CC alpha production from human peripheral blood mononuclear cells and the
CC ability to stimulate B cell proliferation. The BIC compounds are useful
CC for modulating an immune response in an individual suffering from a
CC disorder associated with a T helper (Th)2-type immune response e.g.
CC allergy, allergy-induced asthma or an infectious disease; for increasing
CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
CC are also useful for immunomodulation of cells and individuals; in the
CC fields of biomedicine and immunology; for the manufacture of a medicament
CC for treating idiopathic pulmonary fibrosis, viral infection (e.g.
CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
CC ameliorating an IGE-related disorder in an individual. The disorders
CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
CC cancer; infectious disease resistant to humoral immune responses (e.g.
CC diseases caused by mycobacterial infections and intracellular pathogens,
CC cellular pathogens e.g. bacteria or protozoans or by subcellular
CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
CC leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases
CC caused by intracellular parasites such as malaria; leishmaniasis,
CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
CC the BIC compounds of the invention.

XX Sequence 10 BP; 1 A; 2 C; 2 G; 1 T; 0 U; 4 Other;

Query Match 68.0%; Score 6.8; DB 12; Length 10;

Best Local Similarity 88.9%; Pred. No. 2e+05;

Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGKTCG 10

DB 2 DAHCGKTCG 10

RESULT 72
 ADQ95312 ID ADQ95312 standard; DNA; 10 BP.
 XX
 AC ADQ95312;
 XX
 DT 07-OCT-2004 (first entry)
 XX
 DE Branched immunomodulatory compound related oligonucleotide, SEQ ID 54.
 XX
 KW Antiallergic; Antiasthmatic; Antibacterial; Immunomodulatory; Respiratory;
 KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
 KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
 KW Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Antiulcer;
 KW Gastrointestinal; Nephrotropic; Branched immunomodulatory compound;
 KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
 IFN-alpha; ss.
 KW
 XX
 OS Synthetic.
 XX
 XX
 FH Key Location/Qualifiers
 FT modified_base 5 /*tag= a
 FT /mod_base= OTHER
 FT /note= "c= 5-bromocytosine"
 FT
 XX
 XX WO2004058159-A2.
 XX
 XX 15-JUL-2004.
 XX
 XX 17-DEC-2003; 2003WO-US040417.
 XX
 XX 23-DEC-2002; 2002US-0436406P.
 XX
 XX (DYNA-) DYNAVAX TECHNOLOGIES CORP.
 XX
 XX Fearon KL;
 XX
 XX WPI; 2004-561515/54.
 XX
 XX New branched immunomodulatory compound comprising at least three nucleic
 PT acid moieties and at least one branch-point nucleoside, useful for
 PT modulating an immune response in individual suffering e.g. allergy.
 XX
 XX Disclosure; SEQ ID NO 54; 183pp; English.
 XX
 CC The present invention relates to novel branched immunomodulatory
 CC compounds (BIC) comprising at least three nucleic acid moieties, at least
 CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
 CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
 CC e.g. the ability to stimulate interferon (IFN)-gamma production from
 CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
 CC alpha production from human peripheral blood mononuclear cells and the
 CC ability to stimulate B cell proliferation. The BIC compounds are useful
 CC for modulating an immune response in an individual suffering from a
 CC disorder associated with a T helper (Th)2-type immune response e.g.
 CC allergy, allergy-induced asthma or an infectious disease; for increasing
 CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
 CC are also useful for immunomodulation of cells and individuals; in the
 CC fields of biomedicine and immunology; for the manufacture of a medicament
 CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
 CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
 CC ameliorating an IGE-related disorder in an individual. The disorders
 CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
 CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
 CC cancer; infectious disease resistant to humoral immune responses (e.g.
 CC diseases caused by mycobacterial infections and intracellular pathogens,
 CC cellular pathogens e.g. bacteria or protozoans or by subcellular
 CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
 CC leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases
 CC caused by intracellular parasites such as malaria; leishmaniasis,
 CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
 CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-

CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
 CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.
 XX
 SQ Sequence 10 BP; 2 A; 2 C; 3 G; 3 T; 0 U; 0 Other;
 Query Match 68.0%; Score 6.8; DB 12; Length 10;
 Best Local Similarity 66.7%; Pred. No. 2e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
 QY 2 DANCCKTCG 10
 Db 2 GAACGCTCG 10
 RESULT 73
 ADQ95317 ID ADQ95317 standard; DNA; 10 BP.
 XX
 AC ADQ95317;
 XX
 DT 07-OCT-2004 (first entry)
 XX
 DE Branched immunomodulatory compound related oligonucleotide, SEQ ID 59.
 XX
 KW Antiallergic; Antiasthmatic; Antibacterial; Immunomodulatory; Respiratory;
 KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
 KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
 KW Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Antiulcer;
 KW Gastrointestinal; Nephrotropic; Branched immunomodulatory compound;
 KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
 IFN-alpha; ss.
 KW
 XX
 OS Synthetic.
 XX
 XX
 FH Key Location/Qualifiers
 FT modified_base 5 /*tag= a
 FT /mod_base= OTHER
 FT /note= "c= 5-bromocytosine"
 FT
 XX
 XX WO2004058159-A2.
 XX
 XX 15-JUL-2004.
 XX
 XX 17-DEC-2003; 2003WO-US040417.
 XX
 XX 23-DEC-2002; 2002US-0436406P.
 XX
 XX (DYNA-) DYNAVAX TECHNOLOGIES CORP.
 XX
 XX Fearon KL;
 XX
 XX WPI; 2004-561515/54.
 XX
 XX New branched immunomodulatory compound comprising at least three nucleic
 PT acid moieties and at least one branch-point nucleoside, useful for
 PT modulating an immune response in individual suffering e.g. allergy.
 XX
 XX Disclosure; SEQ ID NO 59; 183pp; English.
 XX
 CC The present invention relates to novel branched immunomodulatory
 CC compounds (BIC) comprising at least three nucleic acid moieties, at least
 CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
 CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
 CC e.g. the ability to stimulate interferon (IFN)-gamma production from
 CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
 CC alpha production from human peripheral blood mononuclear cells and the
 CC ability to stimulate B cell proliferation. The BIC compounds are useful
 CC for modulating an immune response in an individual suffering from a
 CC disorder associated with a T helper (Th)2-type immune response e.g.
 CC allergy, allergy-induced asthma or an infectious disease; for increasing
 CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
 CC are also useful for immunomodulation of cells and individuals; in the
 CC fields of biomedicine and immunology; for the manufacture of a medicament
 CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
 CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
 CC ameliorating an IGE-related disorder in an individual. The disorders
 CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
 CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
 CC cancer; infectious disease resistant to humoral immune responses (e.g.
 CC diseases caused by mycobacterial infections and intracellular pathogens,
 CC cellular pathogens e.g. bacteria or protozoans or by subcellular
 CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
 CC leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases
 CC caused by intracellular parasites such as malaria; leishmaniasis,
 CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
 CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-

are also useful for immunomodulation of cells and individuals; in the fields of biomedicine and immunology; for the manufacture of a medicament ; for treating idiopathic pulmonary fibrosis, viral infection (e.g. hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for ameliorating an IGE-related disorder in an individual. The disorders includes atopic dermatitis, eosinophilic gastrointestinal inflammation, eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis; cancer; infectious disease resistant to humoral immune responses (e.g. diseases caused by mycobacterial infections and intracellular pathogens, cellular pathogens e.g. bacteria or protozoans or by subcellular pathogens e.g. viruses); mycobacterial diseases such as tuberculosis, leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases caused by intracellular parasites such as malaria; leishmaniasis, toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-induced fibrosis, hepatic fibrosis including schistosomiasis-induced hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in the BIC compounds of the invention.

XX Sequence 10 BP; 1 A; 3 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 68.0%; Score 6.8; DB 12; Length 10;
 Best Local Similarity 66.7%; Pred. No. 2e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
 : |||||
 Db 2 TACCGTTCG 10

RESULT 74
 ADQ95266
 ID ADQ95266 standard; DNA; 10 BP.
 XX
 AC ADQ95266;
 XX
 DT 07-OCT-2004 (first entry)
 DE Branched immunomodulatory compound related oligonucleotide, SEQ ID 8.
 XX
 KW Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
 KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
 KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
 KW Tuberculostatic; Antileptotic; Antiparasitic; Antimalarial; Antiulcer;
 KW Gastrointestinal; Nephrotropic; branched immunomodulatory compound;
 KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
 KW IFN-alpha; ss.
 XX
 OS Synthetic.
 XX
 PN WO2004058159-A2.
 XX
 PD 15-JUL-2004.
 XX
 PF 17-DEC-2003; 2003WO-US040417.
 XX
 PR 23-DEC-2002; 2002US-0436406P.
 XX
 XX (DYNA-) DYNVAX TECHNOLOGIES CORP.
 PA
 PI Fearon KL;
 XX
 DR WPI; 2004-561515/54.
 XX

XX New branched immunomodulatory compound comprising at least three nucleic acid moieties and at least one branch-point nucleoside, useful for modulating an immune response in individual suffering e.g. allergy.

XX Disclosure; SEQ ID NO 8; 183pp; English.

XX The present invention relates to novel branched immunomodulatory compounds (BIC) comprising at least three nucleic acid moieties, at least one of which comprises the nucleotide sequence 5'-CG-3', and at least one

CC branch-point nucleoside. The BIC compounds has immunomodulatory activity e.g. the ability to stimulate interferon (IFN)-gamma production from human peripheral blood mononuclear cells, the ability to stimulate IFN-alpha production from human peripheral blood mononuclear cells and the ability to stimulate B cell proliferation. The BIC compounds are useful for modulating an immune response in an individual suffering from a disorder associated with a T helper (Th)2-type immune response e.g. allergy, allergy-induced asthma or an infectious disease; for increasing secretion of IFN-gamma by blood cells in an individual. The BIC compounds are also useful for immunomodulation of cells and individuals; in the fields of biomedicine and immunology; for the manufacture of a medicament ; for treating idiopathic pulmonary fibrosis, viral infection (e.g. hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for ameliorating an IGE-related disorder in an individual. The disorders includes atopic dermatitis, eosinophilic gastrointestinal inflammation, eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis; cancer; infectious disease resistant to humoral immune responses (e.g. diseases caused by mycobacterial infections and intracellular pathogens, cellular pathogens e.g. bacteria or protozoans or by subcellular pathogens e.g. viruses); mycobacterial diseases such as tuberculosis, leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases caused by intracellular parasites such as malaria; leishmaniasis, toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-induced fibrosis, hepatic fibrosis including schistosomiasis-induced hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in the BIC compounds of the invention.

XX
 SQ Sequence 10 BP; 1 A; 3 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 68.0%; Score 6.8; DB 12; Length 10;
 Best Local Similarity 66.7%; Pred. No. 2e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
 : |||||
 Db 2 TACCGTTCG 10

RESULT 75
 ADQ95267
 ID ADQ95267 standard; DNA; 10 BP.
 XX
 AC ADQ95267;
 XX
 DT 07-OCT-2004 (first entry)
 XX
 DE Branched immunomodulatory compound related oligonucleotide, SEQ ID 9.
 XX
 KW Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
 KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
 KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
 KW Tuberculostatic; Antileptotic; Antiparasitic; Antimalarial; Antiulcer;
 KW Gastrointestinal; Nephrotropic; branched immunomodulatory compound;
 KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
 KW IFN-alpha; ss.
 XX
 OS Synthetic.
 XX
 PN WO2004058159-A2.
 XX
 PD 15-JUL-2004.
 XX
 PF 17-DEC-2003; 2003WO-US040417.
 XX
 PR 23-DEC-2002; 2002US-0436406P.
 XX
 XX (DYNA-) DYNVAX TECHNOLOGIES CORP.
 PA
 PI Fearon KL;
 XX
 DR WPI; 2004-561515/54.
 XX

PT New branched immunomodulatory compound comprising at least three nucleic
 PT acid moieties, and at least one branch-point nucleoside, useful for
 PT modulating an immune response in individual suffering e.g. allergy.
 XX
 PS
 PS
 XX
 XX
 CC Disclosure; SEQ ID NO 9; 183pp; English.
 CC
 CC The present invention relates to novel branched immunomodulatory
 CC compounds (BIC) comprising at least three nucleic acid moieties, at least
 CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
 CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
 CC e.g. the ability to stimulate interferon (IFN)-gamma production from
 CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
 CC alpha production from human peripheral blood mononuclear cells and the
 CC ability to stimulate B cell proliferation. The BIC compounds are useful
 CC for modulating an immune response in an individual suffering from a
 CC disorder associated with a T helper (Th)2-type immune response e.g.
 CC allergy, allergy-induced asthma or an infectious disease; for increasing
 CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
 CC are also useful for immunomodulation of cells and individuals; in the
 CC fields of biomedicine and immunology; for the manufacture of a medicament
 CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
 CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
 CC ameliorating an IGE-related disorder in an individual. The disorders
 CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
 CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
 CC cancer; infectious disease resistant to humoral immune responses (e.g.
 CC diseases caused by mycobacterial infections and intracellular pathogens,
 CC cellular pathogens e.g. bacteria or protozoans or by subcellular
 CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
 CC leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases
 CC caused by intracellular parasites such as malaria; leishmaniasis,
 CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
 CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
 CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
 CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.
 XX
 SQ Sequence 10 BP; 1 A; 2 C; 4 G; 3 T; 0 U; 0 Other;
 Query Match 68.0%; Score 6.8; DB 12; Length 10;
 Best Local Similarity 66.7%; Pred. No. 2e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
 QY 2 DANCGRKTCG 10
 Db :|||:
 2 GATCGGTCG 10
 RESULT 76
 ADQ95319 ID ADQ95319 standard; DNA; 10 BP.
 XX
 XX
 AC ADQ95319;
 XX
 XX 07-OCT-2004 (first entry)
 XX
 XX Branched immunomodulatory compound related oligonucleotide, SEQ ID 61.
 KW Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
 KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
 KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
 KW Tuberculositic; Antileprotic; Antiparasitic; Antimalarial; Antitumor;
 KW Gastrointestinal; Nephrotropic; branched immunomodulatory compound;
 KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
 KW IFN-alpha; ss.
 XX
 XX Synthetic.
 OS
 OS
 XX
 XX Key Location/Qualifiers
 FH modified_base 5 /*tag= a
 FT /mod_base= OTHER
 FT /note= "C= 5-bromocytosine"
 FT

XX WO2004058159-A2.
 XX 15-JUL-2004.
 XX
 XX 17-DEC-2003; 2003WO-US040417.
 XX
 XX 23-DEC-2002; 2002US-0436406P.
 XX
 XX (DYNA-) DYNAVAX TECHNOLOGIES CORP.
 XX
 XX Fearon KL;
 XX WPI; 2004-561515/54.
 XX
 XX New branched immunomodulatory compound comprising at least three nucleic
 PT acid moieties and at least one branch-point nucleoside, useful for
 PT modulating an immune response in individual suffering e.g. allergy.
 XX
 XX Disclosure; SEQ ID NO 61; 183pp; English.
 XX
 CC The present invention relates to novel branched immunomodulatory
 CC compounds (BIC) comprising at least three nucleic acid moieties, at least
 CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
 CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
 CC e.g. the ability to stimulate interferon (IFN)-gamma production from
 CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
 CC alpha production from human peripheral blood mononuclear cells and the
 CC ability to stimulate B cell proliferation. The BIC compounds are useful
 CC for modulating an immune response in an individual suffering from a
 CC disorder associated with a T helper (Th)2-type immune response e.g.
 CC allergy, allergy-induced asthma or an infectious disease; for increasing
 CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
 CC are also useful for immunomodulation of cells and individuals; in the
 CC fields of biomedicine and immunology; for the manufacture of a medicament
 CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
 CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
 CC ameliorating an IGE-related disorder in an individual. The disorders
 CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
 CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
 CC cancer; infectious disease resistant to humoral immune responses (e.g.
 CC diseases caused by mycobacterial infections and intracellular pathogens,
 CC cellular pathogens e.g. bacteria or protozoans or by subcellular
 CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
 CC leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases
 CC caused by intracellular parasites such as malaria; leishmaniasis,
 CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
 CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
 CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
 CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.
 XX
 SQ Sequence 10 BP; 3 A; 2 C; 3 G; 1 T; 1 U; 0 Other;
 Query Match 68.0%; Score 6.8; DB 12; Length 10;
 Best Local Similarity 66.7%; Pred. No. 2e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
 QY 2 DANCGRKTCG 10
 Db :|||:
 2 AAACGUTCG 10
 RESULT 77
 ADQ95269 ID ADQ95269 standard; DNA; 10 BP.
 XX
 XX
 AC ADQ95269;
 XX
 XX 07-OCT-2004 (first entry)
 XX
 XX Branched immunomodulatory compound related oligonucleotide, SEQ ID 11.
 DE
 XX

KW Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
 KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
 KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
 KW Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Antiulcer;
 KW Gastrointestinal; Nephrotropic; branched immunomodulatory compound;
 KW Immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
 KW IFN-alpha; ss.
 XX
 XX Synthetic.
 XX
 XX W02004058159-A2.
 XX PD 15-JUL-2004.
 XX PF 17-DEC-2003; 2003WO-US040417.
 XX PR 23-DEC-2002; 2002US-0436406P.
 XX PA (DYNA-) DYNAXVAX TECHNOLOGIES CORP.
 XX PI Fearon KL;
 XX XX WPI; 2004-561515/54.
 XX DR New branched immunomodulatory compound comprising at least three nucleic
 XX acid moieties and at least one branch-point nucleoside, useful for
 XX PT modulating an immune response in individual suffering e.g. allergy.
 XX PS Disclosure; SEQ ID NO 11; 183pp; English.
 XX
 CC The present invention relates to novel branched immunomodulatory
 CC compounds (BIC) comprising at least three nucleic acid moieties, at least
 CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
 CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
 CC e.g. the ability to stimulate interferon (IFN)-gamma production from
 CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
 CC alpha production from human peripheral blood mononuclear cells and the
 CC ability to stimulate B cell proliferation. The BIC compounds are useful
 CC for modulating an immune response in an individual suffering from a
 CC disorder associated with a T helper (Th)2-type immune response e.g.
 CC allergy, allergy-induced asthma or an infectious disease; for increasing
 CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
 CC are also useful for immunomodulation of cells and individuals; in the
 CC fields of biomedicine and immunology; for the manufacture of a medicament
 CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
 CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
 CC ameliorating an Igs-related disorder in an individual. The disorders
 CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
 CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
 CC cancer; infectious disease resistant to humoral immune responses (e.g.
 CC diseases caused by mycobacterial infections and intracellular pathogens,
 CC cellular pathogens e.g. bacteria or protozoans or by subcellular
 CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
 CC leprosy or M. marinum or M. ulcerans infections; herpes viruses; diseases
 CC caused by intracellular parasites such as malaria; leishmaniasis,
 CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
 CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
 CC induced fibrosis, renal fibrosis including schistosomiasis-induced
 CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.
 XX
 SQ Sequence 10 BP; 2 A; 2 C; 4 G; 2 T; 0 U; 0 Other;
 Query Match 68.0%; Score 6.8; DB 12; Length 10;
 Best Local Similarity 66.7%; Pred. No. 2e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
 QY 2 DANCGKTCG 10
 Db :|||:|
 2 GAACGGTCG 10
 RESULT 78

ADQ95274
 ID ADQ95274 standard; DNA; 10 BP.
 XX
 AC ADQ95274;
 XX
 DT 07-OCT-2004 (first entry)
 XX
 XX Branched immunomodulatory compound related oligonucleotide, SEQ ID 16.
 XX
 XX Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
 KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
 KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
 KW Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Antiulcer;
 KW Gastrointestinal; Nephrotropic; branched immunomodulatory compound;
 KW Immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
 KW IFN-alpha; ss.
 XX
 XX Synthetic.
 XX
 XX Key Location/Qualifiers
 FT modified_base 1
 FT /*tag= a
 FT /mod_base= OTHER
 FT /note= "c= 5-bromocytosine"
 XX
 XX W02004058159-A2.
 XX PD 15-JUL-2004.
 XX PF 17-DEC-2003; 2003WO-US040417.
 XX PR 23-DEC-2002; 2002US-0436406P.
 XX PA (DYNA-) DYNAXVAX TECHNOLOGIES CORP.
 XX PI Fearon KL;
 XX XX WPI; 2004-561515/54.
 XX New branched immunomodulatory compound comprising at least three nucleic
 XX acid moieties and at least one branch-point nucleoside, useful for
 XX PT modulating an immune response in individual suffering e.g. allergy.
 XX PS Disclosure; SEQ ID NO 16; 183pp; English.
 XX
 CC The present invention relates to novel branched immunomodulatory
 CC compounds (BIC) comprising at least three nucleic acid moieties, at least
 CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
 CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
 CC e.g. the ability to stimulate interferon (IFN)-gamma production from
 CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
 CC alpha production from human peripheral blood mononuclear cells and the
 CC ability to stimulate B cell proliferation. The BIC compounds are useful
 CC for modulating an immune response in an individual suffering from a
 CC disorder associated with a T helper (Th)2-type immune response e.g.
 CC allergy, allergy-induced asthma or an infectious disease; for increasing
 CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
 CC are also useful for immunomodulation of cells and individuals; in the
 CC fields of biomedicine and immunology; for the manufacture of a medicament
 CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
 CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
 CC ameliorating an Igs-related disorder in an individual. The disorders
 CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
 CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
 CC cancer; infectious disease resistant to humoral immune responses (e.g.
 CC diseases caused by mycobacterial infections and intracellular pathogens,
 CC cellular pathogens e.g. bacteria or protozoans or by subcellular
 CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
 CC leprosy or M. marinum or M. ulcerans infections; herpes viruses; diseases
 CC caused by intracellular parasites such as malaria; leishmaniasis,
 CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
 CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
 CC induced fibrosis, renal fibrosis including schistosomiasis-induced
 CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.
 XX

CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.

XX Sequence 10 BP; 1 A; 4 C; 3 G; 2 T; 0 U; 0 Other;
 SQ Best Local Similarity 68.0%; Score 6.8; DB 12; Length 10;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 2 DANCCKTCG 10
 Db 2 GACCGTTCG 10

RESULT 79
 ADQ95274/c
 ID ADQ95274 standard; DNA; 10 BP.

XX AC ADQ95274;

XX DT 07-OCT-2004 (first entry)

XX DE Branched immunomodulatory compound related oligonucleotide, SEQ ID 16.

XX KW Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
 KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
 KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
 KW Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Antiulcer;
 KW Gastrointestinal; Nephrotropic; branched immunomodulatory compound;
 KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
 KW IFN-alpha; ss.

XX OS Synthetic.

XX FH Key Location/Qualifiers

FT modified_base 1 /*tag= a

FT /mod_base= OTHER

FT /note= "C= 5-bromocytosine"

XX PN WO2004058159-A2.

XX PD 15-JUL-2004.

XX PF 17-DEC-2003; 2003WO-US040417.

XX PR 23-DEC-2002; 2002US-0436406P.

XX PA (DYNA-) DYNAXVAX TECHNOLOGIES CORP.

XX PI Fearon KL;

XX DR WPI; 2004-561515/54.

XX New branched immunomodulatory compound comprising at least three nucleic
 PT acid moieties and at least one branch-point nucleoside, useful for
 PT modulating an immune response in individual suffering e.g. allergy.

XX PS Disclosure; SEQ ID NO 16; 183pp; English.

XX The present invention relates to novel branched immunomodulatory
 CC compounds (BIC) comprising at least three nucleic acid moieties, at least
 CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
 CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
 CC e.g. the ability to stimulate interferon (IFN)-gamma production from
 CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
 CC alpha production from human peripheral blood mononuclear cells and the
 CC ability to stimulate B cell proliferation. The BIC compounds are useful
 CC for modulating an immune response in an individual suffering from a
 CC disorder associated with a T helper (Th)2-type immune response e.g.
 CC allergy, allergy-induced asthma or an infectious disease; for increasing
 CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
 CC are also useful for immunomodulation of cells and individuals; in the

CC fields of biomedicine and immunology; for the manufacture of a medicament
 CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
 CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
 CC ameliorating an IGF-related disorder in an individual. The disorders
 CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
 CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
 CC cancer; infectious disease resistant to humoral immune responses (e.g.
 CC diseases caused by mycobacterial infections and intracellular pathogens,
 CC cellular pathogens e.g. bacteria or protozoans or by subcellular
 CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
 CC leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases
 CC caused by intracellular parasites such as malaria; leishmaniasis,
 CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
 CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
 CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
 CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.

XX SQ Sequence 10 BP; 1 A; 4 C; 3 G; 2 T; 0 U; 0 Other;

Query Match 68.0%; Score 6.8; DB 12; Length 10;
 Best Local Similarity 66.7%; Pred. No. 2e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 2 DANCCKTCG 10

Db 9 GAACGGTTCG 1

RESULT 80

ADQ95268

ID ADQ95268 standard; DNA; 10 BP.

XX AC ADQ95268;

XX DT 07-OCT-2004 (first entry)

XX DE Branched immunomodulatory compound related oligonucleotide, SEQ ID 10.

XX KW Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
 KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
 KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
 KW Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Antiulcer;
 KW Gastrointestinal; Nephrotropic; branched immunomodulatory compound;
 KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
 KW IFN-alpha; ss.

XX OS Synthetic.

XX PN WO2004058159-A2.

XX PD 15-JUL-2004.

XX PF 17-DEC-2003; 2003WO-US040417.

XX PR 23-DEC-2002; 2002US-0436406P.

XX PA (DYNA-) DYNAXVAX TECHNOLOGIES CORP.

XX PI Fearon KL;

XX DR WPI; 2004-561515/54.

XX New branched immunomodulatory compound comprising at least three nucleic
 PT acid moieties and at least one branch-point nucleoside, useful for
 PT modulating an immune response in individual suffering e.g. allergy.

XX PS Disclosure; SEQ ID NO 10; 183pp; English.

XX The present invention relates to novel branched immunomodulatory
 CC compounds (BIC) comprising at least three nucleic acid moieties, at least
 CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
 CC branch-point nucleoside. The BIC compounds has immunomodulatory activity

CC e.g. the ability to stimulate interferon (IFN)-gamma production from
 CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
 CC alpha production from human peripheral blood mononuclear cells and the
 CC ability to stimulate B cell proliferation. The BIC compounds are useful
 CC for modulating an immune response in an individual suffering from a
 CC disorder associated with a T helper (Th)2-type immune response e.g.
 CC allergy, allergy-induced asthma or an infectious disease; for increasing
 CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
 CC are also useful for immunomodulation of cells and individuals; in the
 CC fields of biomedicine and immunology; for the manufacture of a medicament
 CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
 CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
 CC ameliorating an IgE-related disorder in an individual. The disorders
 CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
 CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
 CC cancer; infectious disease resistant to humoral immune responses (e.g.
 CC diseases caused by mycobacterial infections and intracellular pathogens,
 CC cellular pathogens e.g. bacteria or protozoans or by subcellular
 CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
 CC leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases
 CC caused by intracellular parasites such as malaria; leishmaniasis,
 CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
 CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
 CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
 CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.

XX Sequence 10 BP; 1 A; 2 C; 3 G; 4 T; 0 U; 0 Other;

Query Match 68.0%; Score 6.8; DB 12; Length 10;
 Best Local Similarity 66.7%; Pred. No. 2e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANGGKTCG 10
 :|:|:|:
 Db 2 GATCGTTCG 10

RESULT 81

ADQ95275
 ID ADQ95275 standard; DNA; 10 BP.

AC ADQ95275;

DT 07-OCT-2004 (first entry)

XX Branched immunomodulatory compound related oligonucleotide, SEQ ID 17.

XX Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
 KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
 KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
 KW Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Antiulcer;
 KW Gastrointestinal; Nephrotropic; branched immunomodulatory compound;
 KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
 KW IFN-alpha; ss.

XX Synthetic.

XX WO2004058159-A2.

XX 15-JUL-2004.

XX 17-DEC-2003; 2003WO-US040417.

XX 23-DEC-2002; 2002US-0436406P.

XX (DYNA-) DYNAXVAX TECHNOLOGIES CORP.

XX Fearon KU;

XX WPI; 2004-561515/54.

XX New branched immunomodulatory compound comprising at least three nucleic

PT acid moieties and at least one branch-point nucleoside, useful for
 PT modulating an immune response in individual suffering e.g. allergy.

PS Disclosure; SEQ ID NO 17; 183pp; English.

XX The present invention relates to novel branched immunomodulatory
 CC compounds (BIC) comprising at least three nucleic acid moieties, at least
 CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
 CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
 CC e.g. the ability to stimulate interferon (IFN)-gamma production from
 CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
 CC alpha production from human peripheral blood mononuclear cells and the
 CC ability to stimulate B cell proliferation. The BIC compounds are useful
 CC for modulating an immune response in an individual suffering from a
 CC disorder associated with a T helper (Th)2-type immune response e.g.
 CC allergy, allergy-induced asthma or an infectious disease; for increasing
 CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
 CC are also useful for immunomodulation of cells and individuals; in the
 CC fields of biomedicine and immunology; for the manufacture of a medicament
 CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
 CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
 CC ameliorating an IgE-related disorder in an individual. The disorders
 CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
 CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
 CC cancer; infectious disease resistant to humoral immune responses (e.g.
 CC diseases caused by mycobacterial infections and intracellular pathogens,
 CC cellular pathogens e.g. bacteria or protozoans or by subcellular
 CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
 CC leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases
 CC caused by intracellular parasites such as malaria; leishmaniasis,
 CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammation-
 CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
 CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.

XX Sequence 10 BP; 2 A; 3 C; 3 G; 2 T; 0 U; 0 Other;

Query Match 68.0%; Score 6.8; DB 12; Length 10;

Best Local Similarity 66.7%; Pred. No. 2e+05;

Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANGGKTCG 10

Db 2 GAACGTCG 10

RESULT 82

ADQ95275/c

ID ADQ95275 standard; DNA; 10 BP.

XX ADQ95275;

DT 07-OCT-2004 (first entry)

XX Branched immunomodulatory compound related oligonucleotide, SEQ ID 17.

XX Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
 KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
 KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
 KW Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Antiulcer;
 KW Gastrointestinal; Nephrotropic; branched immunomodulatory compound;
 KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
 KW IFN-alpha; ss.

XX Synthetic.

XX WO2004058159-A2.

XX 15-JUL-2004.

XX 17-DEC-2003; 2003WO-US040417.

PR 23-DEC-2002; 2002US-0436406P.
 XX (DYNA-) DYNAXVAX TECHNOLOGIES CORP.
 PA Fearon KL;
 PI WPI; 2004-561515/54.
 XX New branched immunomodulatory compound comprising at least three nucleic
 DR acid moieties and at least one branch-point nucleoside, useful for
 XX modulating an immune response in individual suffering e.g. allergy.
 XX Disclosure; SEQ ID NO 17; 183pp; English.
 PS The present invention relates to novel branched immunomodulatory
 XX compounds (BIC) comprising at least three nucleic acid moieties, at least
 CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
 CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
 CC e.g. the ability to stimulate interferon (IFN)-gamma production from
 CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
 CC alpha production from human peripheral blood mononuclear cells and the
 CC ability to stimulate B cell proliferation. The BIC compounds are useful
 CC for modulating an immune response in an individual suffering from a
 CC disorder associated with a T helper (Th)2-type immune response e.g.
 CC allergy, allergy-induced asthma or an infectious disease; for increasing
 CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
 CC are also useful for immunomodulation of cells and individuals; in the
 CC fields of biomedicine and immunology; for the manufacture of a medicament
 CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
 CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
 CC ameliorating an IGE-related disorder in an individual. The disorders
 CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
 CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
 CC cancer; infectious disease resistant to humoral immune responses (e.g.
 CC diseases caused by mycobacterial infections and intracellular pathogens,
 CC cellular pathogens e.g. bacteria or protozoans or by subcellular
 CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
 CC leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases
 CC caused by intracellular parasites such as malaria; leishmaniasis,
 CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
 CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
 CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
 CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.
 XX
 SQ Sequence 10 BP; 2 A; 3 C; 3 G; 2 T; 0 U; 0 Other;
 Query Match 68.0%; Score 6.8; DB 12; Length 10;
 Best Local Similarity 66.7%; Pred. No. 2e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
 QY 2 DANCGETCG 10
 Db : |||:|
 9 GAACGTTCG 1
 RESULT 83
 ADQ95315
 ID ADQ95315 standard; DNA; 10 BP.
 AC
 XX ADQ95315;
 XX
 DT 07-OCT-2004 (first entry)
 XX
 DE Branched immunomodulatory compound related oligonucleotide, SEQ ID 57.
 XX
 KW Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
 KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
 KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide; Antitumor;
 KW Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Antiulcer;
 KW Gastrointestinal; Nephrotropic; branched immunomodulatory compound;
 KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
 KW IFN-alpha; ss.

XX Synthetic.
 XX Key Location/Qualifiers
 FH modified_base 5
 FT /tag= a
 FT /mod_base= OTHER
 FT /note= "C= 5-bromocytosine"
 XX WO2004058159-A2.
 XX 15-JUL-2004.
 XX 17-DEC-2003; 2003WO-US040417.
 XX 23-DEC-2002; 2002US-0436406P.
 XX (DYNA-) DYNAXVAX TECHNOLOGIES CORP.
 PA Fearon KL;
 PI WPI; 2004-561515/54.
 XX New branched immunomodulatory compound comprising at least three nucleic
 PT acid moieties and at least one branch-point nucleoside, useful for
 PT modulating an immune response in individual suffering e.g. allergy.
 XX Disclosure; SEQ ID NO 57; 183pp; English.
 XX The present invention relates to novel branched immunomodulatory
 CC compounds (BIC) comprising at least three nucleic acid moieties, at least
 CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
 CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
 CC e.g. the ability to stimulate interferon (IFN)-gamma production from
 CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
 CC alpha production from human peripheral blood mononuclear cells and the
 CC ability to stimulate B cell proliferation. The BIC compounds are useful
 CC for modulating an immune response in an individual suffering from a
 CC disorder associated with a T helper (Th)2-type immune response e.g.
 CC allergy, allergy-induced asthma or an infectious disease; for increasing
 CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
 CC are also useful for immunomodulation of cells and individuals; in the
 CC fields of biomedicine and immunology; for the manufacture of a medicament
 CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
 CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
 CC ameliorating an IGE-related disorder in an individual. The disorders
 CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
 CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
 CC cancer; infectious disease resistant to humoral immune responses (e.g.
 CC diseases caused by mycobacterial infections and intracellular pathogens,
 CC cellular pathogens e.g. bacteria or protozoans or by subcellular
 CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
 CC leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases
 CC caused by intracellular parasites such as malaria; leishmaniasis,
 CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
 CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
 CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
 CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.
 XX
 SQ Sequence 10 BP; 1 A; 2 C; 4 G; 3 T; 0 U; 0 Other;
 Query Match 68.0%; Score 6.8; DB 12; Length 10;
 Best Local Similarity 66.7%; Pred. No. 2e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
 QY 2 DANCGETCG 10
 Db : |||:|
 2 GATCGGTTCG 10
 RESULT 84
 ADQ95326

ID ADQ95326 standard; DNA; 10 BP.
XX
AC ADQ95326;
XX
DT 07-OCT-2004 (first entry)
XX
DE Branched immunomodulatory compound related oligonucleotide, SEQ ID 68.
XX
KW Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
KW Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Antitumor;
KW Gastrointestinal; Nephrotropic; branched immunomodulatory compound;
KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
KW IFN-alpha; ss.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 5 /*tag= a
FT /mod_base= OTHER
FT /note= "c= 5-bromocytosine"
XX
PN WO2004058159-A2.
XX
XX 15-JUL-2004.
XX
XX 17-DEC-2003; 2003WO-US040417.
XX
XX 23-DEC-2002; 2002US-0436406P.
XX
XX (DYNA-) DYNAXVAX TECHNOLOGIES CORP.
XX
PI Fearon KL;
XX
XX WPI; 2004-561515/54.
XX
XX New branched immunomodulatory compound comprising at least three nucleic
PT acid moieties and at least one branch-point nucleoside, useful for
PT modulating an immune response in individual suffering e.g. allergy.
XX
XX Disclosure; SEQ ID NO 68; 183pp; English.
XX
XX The present invention relates to novel branched immunomodulatory
CC compounds (BIC) comprising at least three nucleic acid moieties, at least
CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
CC e.g. the ability to stimulate interferon (IFN)-gamma production from
CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
CC alpha production from human peripheral blood mononuclear cells and the
CC ability to stimulate B cell proliferation. The BIC compounds are useful
CC for modulating an immune response in an individual suffering from a
CC disorder associated with a T helper (Th)2-type immune response e.g.
CC allergy, allergy-induced asthma or an infectious disease; for increasing
CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
CC are also useful for immunomodulation of cells and individuals; in the
CC fields of biomedicine and immunology; for the manufacture of a medicament
CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
CC ameliorating an IGE-related disorder in an individual. The disorders
CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
CC cancer; infectious disease resistant to humoral immune responses (e.g.
CC cellular pathogens e.g. bacteria or protozoans or by subcellular
CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
CC caused by intracellular parasites such as malaria; leishmaniasis,
CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in

CC the BIC compounds of the invention.
XX
XX Sequence 10 BP; 2 A; 2 C; 2 G; 4 T; 0 U; 0 Other;
SQ
Query Match 68.0%; Score 6.8; DB 12; Length 10;
Best Local Similarity 66.7%; Pred. No. 26+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
QY 2 DANCCKTCG 10
Db 2 TAACGCTCG 10
RESULT 85
ADQ95276
ID ADQ95276 standard; DNA; 10 BP.
XX
AC ADQ95276;
XX
DT 07-OCT-2004 (first entry)
XX
DE Branched immunomodulatory compound related oligonucleotide, SEQ ID 18.
XX
KW Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
KW Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Antitumor;
KW Gastrointestinal; Nephrotropic; branched immunomodulatory compound;
KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
KW IFN-alpha; ss.
XX
OS Synthetic.
XX
XX WO2004058159-A2.
XX
XX 15-JUL-2004.
XX
XX 17-DEC-2003; 2003WO-US040417.
XX
XX 23-DEC-2002; 2002US-0436406P.
XX
XX (DYNA-) DYNAXVAX TECHNOLOGIES CORP.
XX
XX Fearon KL;
XX
XX WPI; 2004-561515/54.
XX
XX New branched immunomodulatory compound comprising at least three nucleic
PT acid moieties and at least one branch-point nucleoside, useful for
PT modulating an immune response in individual suffering e.g. allergy.
XX
XX Disclosure; SEQ ID NO 18; 183pp; English.
XX
XX The present invention relates to novel branched immunomodulatory
CC compounds (BIC) comprising at least three nucleic acid moieties, at least
CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
CC e.g. the ability to stimulate interferon (IFN)-gamma production from
CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
CC alpha production from human peripheral blood mononuclear cells and the
CC ability to stimulate B cell proliferation. The BIC compounds are useful
CC for modulating an immune response in an individual suffering from a
CC disorder associated with a T helper (Th)2-type immune response e.g.
CC allergy, allergy-induced asthma or an infectious disease; for increasing
CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
CC are also useful for immunomodulation of cells and individuals; in the
CC fields of biomedicine and immunology; for the manufacture of a medicament
CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
CC ameliorating an IGE-related disorder in an individual. The disorders
CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
CC cancer; infectious disease resistant to humoral immune responses (e.g.
CC cellular pathogens e.g. bacteria or protozoans or by subcellular
CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
CC caused by intracellular parasites such as malaria; leishmaniasis,
CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in

CC diseases caused by mycobacterial infections and intracellular pathogens,
 CC cellular pathogens e.g. bacteria or protozoans or by subcellular
 CC pathogens e.g. viruses; mycobacterial diseases such as tuberculosis,
 CC leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases
 CC caused by intracellular parasites such as malaria; leishmaniasis,
 CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
 CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
 CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
 CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.
 XX
 SQ Sequence 10 BP; 1 A; 4 C; 3 G; 2 T; 0 U; 0 Other;

Query Match 58.0%; Score 6.8; DB 12; Length 10;

Best Local Similarity 66.7%; Pred. No. 2e+05; Indels 0; Gaps 0;
 Matches 6; Conservative 2; Mismatches 1;

QY 2 DANCCKTCG 10

Db 2 GACCGITCG 10

RESULT 86

ADQ95276/c
 ID ADQ95276 standard; DNA; 10 BP.

AC ADQ95276;

DT 07-OCT-2004 (first entry)

DE Branched immunomodulatory compound related oligonucleotide, SEQ ID 18.

XX Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
 KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
 KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
 KW Tuberculostatic; Antileptotic; Antiparasitic; Antimalarial; Antiulcer;
 KW Gastrointestinal; Nephrotropic; Branched immunomodulatory compound;
 KW Immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
 KW IFN-alpha; ss.

OS Synthetic.

XX WO2004058159-A2.

XX 15-JUL-2004.

PF 17-DEC-2003; 2003WO-US040417.

XX 23-DEC-2002; 2002US-0436406P.

XX (DYNA-) DYNAXVAX TECHNOLOGIES CORP.

XX Fearon KU;

XX WPI; 2004-561515/54.

XX New branched immunomodulatory compound comprising at least three nucleic
 PT acid moieties and at least one branch-point nucleoside, useful for
 PT modulating an immune response in individual suffering e.g. allergy.

XX Disclosure; SEQ ID NO 18; 183pp; English.

XX The present invention relates to novel branched immunomodulatory
 CC compounds (BIC) comprising at least three nucleic acid moieties, at least
 CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
 CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
 CC e.g. the ability to stimulate interferon (IFN)-gamma production from
 CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
 CC alpha production from human peripheral blood mononuclear cells and the
 CC ability to stimulate B cell proliferation. The BIC compounds are useful
 CC for modulating an immune response in an individual suffering from a
 CC disorder associated with a T helper (Th) 2-type immune response e.g.
 CC allergy, allergy-induced asthma or an infectious disease; for increasing

CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
 CC are also useful for immunomodulation of cells and individuals; in the
 CC fields of biomedicine and immunology; for the manufacture of a medicament
 CC for treating idiopathic pulmonary fibrosis, viral infection (e.g.
 CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
 CC ameliorating an IGE-related disorder in an individual. The disorders
 CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
 CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
 CC cancer; infectious disease resistant to humoral immune responses (e.g.
 CC diseases caused by mycobacterial infections and intracellular pathogens,
 CC cellular pathogens e.g. bacteria or protozoans or by subcellular
 CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
 CC leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases
 CC caused by intracellular parasites such as malaria; leishmaniasis,
 CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
 CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
 CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
 CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.
 XX

SQ Sequence 10 BP; 1 A; 4 C; 3 G; 2 T; 0 U; 0 Other;

Query Match 58.0%; Score 6.8; DB 12; Length 10;

Best Local Similarity 66.7%; Pred. No. 2e+05; Indels 0; Gaps 0;
 Matches 6; Conservative 2; Mismatches 1;

QY 2 DANCCKTCG 10

Db 9 GACCGITCG 1

RESULT 87

ADQ95270

ID ADQ95270 standard; DNA; 10 BP.

XX ADQ95270;

XX 07-OCT-2004 (first entry)

XX Branched immunomodulatory compound related oligonucleotide, SEQ ID 12.

XX Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
 KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
 KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
 KW Tuberculostatic; Antileptotic; Antiparasitic; Antimalarial; Antiulcer;
 KW Gastrointestinal; Nephrotropic; Branched immunomodulatory compound;
 KW Immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
 KW IFN-alpha; ss.

OS Synthetic.

XX WO2004058159-A2.

XX 15-JUL-2004.

XX 17-DEC-2003; 2003WO-US040417.

XX 23-DEC-2002; 2002US-0436406P.

XX (DYNA-) DYNAXVAX TECHNOLOGIES CORP.

XX Fearon KU;

XX WPI; 2004-561515/54.

XX New branched immunomodulatory compound comprising at least three nucleic
 PT acid moieties and at least one branch-point nucleoside, useful for
 PT modulating an immune response in individual suffering e.g. allergy.

XX Disclosure; SEQ ID NO 12; 183pp; English.

XX The present invention relates to novel branched immunomodulatory
 CC compounds (BIC) comprising at least three nucleic acid moieties, at least

one of which comprises the nucleotide sequence 5'-CG-3', and at least one branch-point nucleoside. The BIC compounds has immunomodulatory activity e.g. the ability to stimulate interferon (IFN)-gamma production from human peripheral blood mononuclear cells, the ability to stimulate IFN-alpha production from human peripheral blood mononuclear cells and the ability to stimulate B cell proliferation. The BIC compounds are useful for modulating an immune response in an individual suffering from a disorder associated with a T helper (Th)2-type immune response e.g. allergy, allergy-induced asthma or an infectious disease; for increasing secretion of IFN-gamma by blood cells in an individual. The BIC compounds are also useful for immunomodulation of cells and individuals; in the fields of biomedicine and immunology; for the manufacture of a medicament ; for treating idiopathic pulmonary fibrosis, viral infection (e.g. hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for ameliorating an IgE-related disorder in an individual. The disorders includes atopic dermatitis, eosinophilic gastrointestinal inflammation, eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis; cancer; infectious disease resistant to humoral immune responses (e.g. diseases caused by mycobacterial infections and intracellular pathogens, cellular pathogens e.g. bacteria or protozoans or by subcellular pathogens e.g. viruses); mycobacterial diseases such as tuberculosis, leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases caused by intracellular parasites such as malaria; leishmaniasis, toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-induced fibrosis, hepatic fibrosis including schistosomiasis-induced hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in the BIC compounds of the invention.

XX Sequence 10 BP; 2 A; 2 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 68.0%; Score 6.8; DB 12; Length 10;
Best Local Similarity 66.7%; Pred. No. 2e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
QY 2 DANCCKTTCG 10
: ||: |||
Db 2 TAACGTTTCG 10

RESULT 88

ADQ95272

ID ADQ95272 standard; DNA; 10 BP.

XX AC ADQ95272;

DT 07-OCT-2004 (first entry)

XX Branched immunomodulatory compound related oligonucleotide, SEQ ID 14.

XX Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
KW Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Antiulcer;
KW Gastrointestinal; Nephrotropic; Branched immunomodulatory compound;
KW Immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
KW IFN-alpha; ss.

XX Synthetic.

XX WO2004058159-A2.

XX 15-JUL-2004.

XX 17-DEC-2003; 2003WO-US040417.

XX 23-DEC-2002; 2002US-0436406P.

XX (DYNA-) DYNAXV TECHNOLOGIES CORP.

XX Fearon Klr;

XX WPI; 2004-561515/54.

XX New branched immunomodulatory compound comprising at least three nucleic acid moieties and at least one branch-point nucleoside, useful for modulating an immune response in individual suffering e.g. allergy.

XX Disclosure; SEQ ID NO 14; 183pp; English.

XX The present invention relates to novel branched immunomodulatory compounds (BIC) comprising at least three nucleic acid moieties, at least one of which comprises the nucleotide sequence 5'-CG-3', and at least one branch-point nucleoside. The BIC compounds has immunomodulatory activity e.g. the ability to stimulate interferon (IFN)-gamma production from human peripheral blood mononuclear cells, the ability to stimulate IFN-alpha production from human peripheral blood mononuclear cells and the ability to stimulate B cell proliferation. The BIC compounds are useful for modulating an immune response in an individual suffering from a disorder associated with a T helper (Th)2-type immune response e.g. allergy, allergy-induced asthma or an infectious disease; for increasing secretion of IFN-gamma by blood cells in an individual. The BIC compounds are also useful for immunomodulation of cells and individuals; in the fields of biomedicine and immunology; for the manufacture of a medicament ; for treating idiopathic pulmonary fibrosis, viral infection (e.g. hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for ameliorating an IgE-related disorder in an individual. The disorders includes atopic dermatitis, eosinophilic gastrointestinal inflammation, eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis; cancer; infectious disease resistant to humoral immune responses (e.g. diseases caused by mycobacterial infections and intracellular pathogens, cellular pathogens e.g. bacteria or protozoans or by subcellular pathogens e.g. viruses); mycobacterial diseases such as tuberculosis, leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases caused by intracellular parasites such as malaria; leishmaniasis, toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-induced fibrosis, hepatic fibrosis including schistosomiasis-induced hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in the BIC compounds of the invention.

XX Sequence 10 BP; 1 A; 3 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 68.0%; Score 6.8; DB 12; Length 10;

Best Local Similarity 66.7%; Pred. No. 2e+05;

Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTTCG 10

: ||: |||

Db 2 TAACGTTTCG 10

RESULT 89

ADQ95314

ID ADQ95314 standard; DNA; 10 BP.

XX AC ADQ95314;

DT 07-OCT-2004 (first entry)

XX Branched immunomodulatory compound related oligonucleotide, SEQ ID 56.

XX Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
KW Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Antiulcer;
KW Gastrointestinal; Nephrotropic; Branched immunomodulatory compound;
KW Immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
KW IFN-alpha; ss.

XX Synthetic.

XX Key Location/Qualifiers

FT modified_base 5

FT /*tag= a

FT /mod_base= OTHER

FT XX /note= "c= 5-bromocytosine"
 PN WO2004058159-A2.
 XX 15-JUL-2004.
 PD 17-DEC-2003; 2003WO-US040417.
 PF 23-DEC-2002; 2002US-0436406P.
 XX (DYNA-) DYNAXX TECHNOLOGIES CORP.
 XX Fearon KL;
 XX WPI; 2004-561515/54.
 DR New branched immunomodulatory compound comprising at least three nucleic
 PT acid moieties and at least one branch-point nucleoside, useful for
 PT modulating an immune response in individual suffering e.g. allergy.
 XX Disclosure; SEQ ID NO 56; 183pp; English.
 XX The present invention relates to novel branched immunomodulatory
 CC compounds (BIC) comprising at least three nucleic acid moieties, at least
 CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
 CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
 CC e.g. the ability to stimulate interferon (IFN)-gamma production from
 CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
 CC alpha production from human peripheral blood mononuclear cells and the
 CC ability to stimulate B cell proliferation. The BIC compounds are useful
 CC for modulating an immune response in an individual suffering from a
 CC disorder associated with a T helper (Th)2-type immune response e.g.
 CC allergy, allergy-induced asthma or an infectious disease; for increasing
 CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
 CC are also useful for immunomodulation of cells and individuals; in the
 CC fields of biomedicine and immunology; for the manufacture of a medicament
 CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
 CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
 CC ameliorating an IGE-related disorder in an individual. The disorders
 CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
 CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
 CC cancer; infectious disease resistant to humoral immune responses (e.g.
 CC diseases caused by mycobacterial infections and intracellular pathogens,
 CC cellular pathogens e.g. bacteria or protozoans or by subcellular
 CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
 CC leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases
 CC caused by intracellular parasites such as malaria; leishmaniasis,
 CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
 CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
 CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
 CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.
 XX Sequence 10 BP; 1 A; 3 C; 3 G; 3 T; 0 U; 0 Other;
 SQ Query Match 68.0%; Score 6.8; DB 12; Length 10;
 Best Local Similarity 66.7%; Pred. No. 2e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
 QY 2 DANCGETCG 10
 : |||||
 Db . 2 GACCGTTCG 10
 RESULT 90
 ADQ95333
 ID ADQ95333 standard; DNA; 10 BP.
 XX ADQ95333;
 AC ADQ95333;
 XX 07-OCT-2004 (first entry)
 DT Branched immunomodulatory compound related oligonucleotide, SEQ ID 75.
 XX

XX Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
 KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
 KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
 KW Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Anticancer;
 KW Gastrointestinal; Nephrotropic; branched immunomodulatory compound;
 KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
 KW IFN-alpha; ss.
 XX Synthetic.
 OS Key Location/Qualifiers
 XX modified_base 1 /*tag= a
 FT /mod_base= OTHER
 FT /note= "n= T, C or 5-bromocytosine"
 FT WO2004058159-A2.
 PN 15-JUL-2004.
 XX 17-DEC-2003; 2003WO-US040417.
 PF 23-DEC-2002; 2002US-0436406P.
 PR (DYNA-) DYNAXX TECHNOLOGIES CORP.
 PA Fearon KL;
 PI WPI; 2004-561515/54.
 DR New branched immunomodulatory compound comprising at least three nucleic
 PT acid moieties and at least one branch-point nucleoside, useful for
 PT modulating an immune response in individual suffering e.g. allergy.
 XX Disclosure; SEQ ID NO 75; 183pp; English.
 XX The present invention relates to novel branched immunomodulatory
 CC compounds (BIC) comprising at least three nucleic acid moieties, at least
 CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
 CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
 CC e.g. the ability to stimulate interferon (IFN)-gamma production from
 CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
 CC alpha production from human peripheral blood mononuclear cells and the
 CC ability to stimulate B cell proliferation. The BIC compounds are useful
 CC for modulating an immune response in an individual suffering from a
 CC disorder associated with a T helper (Th)2-type immune response e.g.
 CC allergy, allergy-induced asthma or an infectious disease; for increasing
 CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
 CC are also useful for immunomodulation of cells and individuals; in the
 CC fields of biomedicine and immunology; for the manufacture of a medicament
 CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
 CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
 CC ameliorating an IGE-related disorder in an individual. The disorders
 CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
 CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
 CC cancer; infectious disease resistant to humoral immune responses (e.g.
 CC diseases caused by mycobacterial infections and intracellular pathogens,
 CC cellular pathogens e.g. bacteria or protozoans or by subcellular
 CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
 CC leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases
 CC caused by intracellular parasites such as malaria; leishmaniasis,
 CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
 CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
 CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
 CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.
 XX Sequence 10 BP; 1 A; 2 C; 2 G; 1 T; 0 U; 4 Other;
 SQ Query Match 68.0%; Score 6.8; DB 12; Length 10;
 Best Local Similarity 88.9%; Pred. No. 2e+05;
 Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
 QY 2 DANCGETCG 10
 : |||||
 Db . 2 GACCGTTCG 10
 RESULT 90
 ADQ95333
 ID ADQ95333 standard; DNA; 10 BP.
 XX ADQ95333;
 AC ADQ95333;
 XX 07-OCT-2004 (first entry)
 DT Branched immunomodulatory compound related oligonucleotide, SEQ ID 75.
 XX

QY 2 DANCCKTCG 10
 DB 2 DANCCKTCG 10

RESULT 91
 ADQ95264
 ID ADQ95264 standard; DNA; 10 BP.
 XX
 AC ADQ95264;
 XX
 DT 07-OCT-2004 (first entry)
 XX
 DE Branched immunomodulatory compound related oligonucleotide, SEQ ID 6.
 XX
 KW Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
 KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
 KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
 KW Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Antiulcer;
 KW Gastrointestinal; Nephrotropic; branched immunomodulatory compound;
 KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
 KW IFN-alpha; ss.
 XX
 OS Synthetic.
 XX
 PN WO2004058159-A2.
 XX
 PD 15-JUL-2004.
 XX
 PF 17-DEC-2003; 2003WO-US040417.
 XX
 PR 23-DEC-2002; 2002US-0436406P.
 XX
 PA (DYNA-) DYNAXX TECHNOLOGIES CORP.
 XX
 PI Fearon KL;
 XX
 DR WPI; 2004-561515/54.
 XX
 PT New branched immunomodulatory compound comprising at least three nucleic
 PT acid moieties and at least one branch-point nucleoside, useful for
 PT modulating an immune response in individual suffering e.g. allergy.
 XX
 PS Disclosure; SEQ ID NO 6; 183pp; English.
 XX
 CC The present invention relates to novel branched immunomodulatory
 CC compounds (BIC) comprising at least three nucleic acid moieties, at least
 CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
 CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
 CC e.g. the ability to stimulate interferon (IFN)-gamma production from
 CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
 CC alpha production from human peripheral blood mononuclear cells and the
 CC ability to stimulate B cell proliferation. The BIC compounds are useful
 CC for modulating an immune response in an individual suffering from a
 CC disorder associated with a T helper (Th)2-type immune response e.g.
 CC allergy, allergy-induced asthma or an infectious disease; for increasing
 CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
 CC are also useful for immunomodulation of cells and individuals; in the
 CC fields of biomedicine and immunology; for the manufacture of a medicament
 CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
 CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
 CC ameliorating an Ige-related disorder in an individual. The disorders
 CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
 CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
 CC cancer; infectious disease resistant to humoral immune responses (e.g.
 CC diseases caused by mycobacterial infections and intracellular pathogens,
 CC cellular pathogens e.g. bacteria or protozoans or by subcellular
 CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
 CC leprosy or M. Marinum or P. ulcerans infections; herpes viruses; diseases
 CC caused by intracellular parasites such as malaria; leishmaniasis,
 CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
 CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-

CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
 CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.
 XX
 SQ Sequence 10 BP; 2 A; 2 C; 4 G; 2 T; 0 U; 0 Other;
 Query Match 68.0%; Score 6.8; DB 12; Length 10;
 Best Local Similarity 66.7%; Pred. No. 2e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
 QY 2 DANCCKTCG 10
 DB 2 GAACGTCG 10

RESULT 92
 ADQ95313
 ID ADQ95313 standard; DNA; 10 BP.
 XX
 AC ADQ95313;
 XX
 DT 07-OCT-2004 (first entry)
 XX
 DE Branched immunomodulatory compound related oligonucleotide, SEQ ID 55.
 XX
 KW Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
 KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
 KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
 KW Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Antiulcer;
 KW Gastrointestinal; Nephrotropic; branched immunomodulatory compound;
 KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
 KW IFN-alpha; ss.
 XX
 OS Synthetic.
 XX
 PN WO2004058159-A2.
 XX
 PD 15-JUL-2004.
 XX
 PF 17-DEC-2003; 2003WO-US040417.
 XX
 PR 23-DEC-2002; 2002US-0436406P.
 XX
 PA (DYNA-) DYNAXX TECHNOLOGIES CORP.
 XX
 PI Fearon KL;
 XX
 DR WPI; 2004-561515/54.
 XX
 PT New branched immunomodulatory compound comprising at least three nucleic
 PT acid moieties and at least one branch-point nucleoside, useful for
 PT modulating an immune response in individual suffering e.g. allergy.
 XX
 PS Disclosure; SEQ ID NO 55; 183pp; English.
 XX
 CC The present invention relates to novel branched immunomodulatory
 CC compounds (BIC) comprising at least three nucleic acid moieties, at least
 CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
 CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
 CC e.g. the ability to stimulate interferon (IFN)-gamma production from
 CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
 CC alpha production from human peripheral blood mononuclear cells and the
 CC ability to stimulate B cell proliferation. The BIC compounds are useful
 CC for modulating an immune response in an individual suffering from a
 CC disorder associated with a T helper (Th)2-type immune response e.g.
 CC allergy, allergy-induced asthma or an infectious disease; for increasing
 CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
 CC are also useful for immunomodulation of cells and individuals; in the
 CC fields of biomedicine and immunology; for the manufacture of a medicament
 CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
 CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
 CC ameliorating an Ige-related disorder in an individual. The disorders
 CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
 CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
 CC cancer; infectious disease resistant to humoral immune responses (e.g.
 CC diseases caused by mycobacterial infections and intracellular pathogens,
 CC cellular pathogens e.g. bacteria or protozoans or by subcellular
 CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
 CC leprosy or M. Marinum or P. ulcerans infections; herpes viruses; diseases
 CC caused by intracellular parasites such as malaria; leishmaniasis,
 CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
 CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-

CC are also useful for immunomodulation of cells and individuals; in the
 CC fields of biomedicine and immunology; for the manufacture of a medicament
 CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
 CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
 CC ameliorating an Igs-related disorder in an individual. The disorders
 CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
 CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
 CC diseases caused by mycobacterial infections and intracellular pathogens,
 CC cancer; infectious disease resistant to humoral immune responses (e.g.
 CC cellular pathogens e.g. bacteria or protozoans or by subcellular
 CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
 CC leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases
 CC caused by intracellular parasites such as malaria; leishmaniasis,
 CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
 CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
 CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
 CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.

XX SQ Sequence 10 BP; 2 A; 2 C; 3 G; 2 T; 1 U; 0 Other;

Query Match 68.0%; Score 6.8; DB 12; Length 10;
 Best Local Similarity 66.7%; Pred. No. 2e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
 Db 2 GAACGCTCG 10

RESULT 93

ADQ95325
 ID ADQ95325 standard; DNA; 10 BP.

AC ADQ95325;

DT 07-OCT-2004 (first entry)

DE Branched immunomodulatory compound related oligonucleotide, SEQ ID 67.

XX Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
 KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
 KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
 KW Tuberculosis; Antileprotic; Antiparasitic; Antimalarial; Antiulcer;
 KW Gastrointestinal; Nephrotropic; branched immunomodulatory compound;
 KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
 KW IFN-alpha; ss.

OS Synthetic.

XX Key Location/Qualifiers
 FH modified_base 5 /*tag= a
 FT /mod_base= OTHER
 FT /note= "c= 5-bromocytosine"

XX WO2004058159-A2.

XX 15-JUL-2004.

XX 17-DEC-2003; 2003WO-US040417.

XX 23-DEC-2002; 2002US-0436406P.

XX (DYNA-) DYNNAVX TECHNOLOGIES CORP.

XX Fearon KL;

XX WPI; 2004-561515/54.

XX New branched immunomodulatory compound comprising at least three nucleic
 PT acid moieties and at least one branch-point nucleoside, useful for
 PT modulating an immune response in individual suffering e.g. allergy.

XX

PS Disclosure; SEQ ID NO 67; 183pp; English.

XX

CC The present invention relates to novel branched immunomodulatory
 CC compounds (BIC) comprising at least three nucleic acid moieties, at least
 CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
 CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
 CC e.g. the ability to stimulate interferon (IFN)-gamma production from
 CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
 CC alpha production from human peripheral blood mononuclear cells and the
 CC ability to stimulate B cell proliferation. The BIC compounds are useful
 CC for modulating an immune response in an individual suffering from a
 CC disorder associated with a T helper (Th)2-type immune response e.g.
 CC allergy, allergy-induced asthma or an infectious disease; for increasing
 CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
 CC are also useful for immunomodulation of cells and individuals; in the
 CC fields of biomedicine and immunology; for the manufacture of a medicament
 CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
 CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
 CC ameliorating an Igs-related disorder in an individual. The disorders
 CC includes atopic dermatitis, eosinophilic bronchopulmonary aspergillosis,
 CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
 CC cancer; infectious disease resistant to humoral immune responses (e.g.
 CC diseases caused by mycobacterial infections and intracellular pathogens,
 CC cellular pathogens e.g. bacteria or protozoans or by subcellular
 CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
 CC leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases
 CC caused by intracellular parasites such as malaria; leishmaniasis,
 CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
 CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
 CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
 CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.

XX SQ Sequence 10 BP; 2 A; 2 C; 2 G; 2 T; 2 U; 0 Other;

Query Match 68.0%; Score 6.8; DB 12; Length 10;
 Best Local Similarity 66.7%; Pred. No. 2e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10

Db 2 UAACGCTCG 10

RESULT 94

ADQ95263
 ID ADQ95263 standard; DNA; 10 BP.

XX ADQ95263;

XX 07-OCT-2004 (first entry)

XX Branched immunomodulatory compound related oligonucleotide, SEQ ID 5.

XX Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
 KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
 KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
 KW Tuberculosis; Antileprotic; Antiparasitic; Antimalarial; Antiulcer;
 KW Gastrointestinal; Nephrotropic; branched immunomodulatory compound;
 KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
 KW IFN-alpha; ss.

OS Synthetic.

XX WO2004058159-A2.

XX 15-JUL-2004.

XX 17-DEC-2003; 2003WO-US040417.

XX 23-DEC-2002; 2002US-0436406P.

PA (DYNA-) DYNAXVAX TECHNOLOGIES CORP.
 XX Fearon KL;
 XX WPI; 2004-561515/54.
 XX New branched immunomodulatory compound comprising at least three nucleic
 PT acid moieties and at least one branch-point nucleoside, useful for
 PT modulating an immune response in individual suffering e.g. allergy.
 XX
 PS Disclosure; SEQ ID NO 5; 183pp; English.
 XX
 CC The present invention relates to novel branched immunomodulatory
 CC compounds (BIC) comprising at least three nucleic acid moieties, at least
 CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
 CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
 CC e.g. the ability to stimulate interferon (IFN)-gamma production from
 CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
 CC alpha production from human peripheral blood mononuclear cells and the
 CC ability to stimulate B cell proliferation. The BIC compounds are useful
 CC for modulating an immune response in an individual suffering from a
 CC disorder associated with a T helper (Th)2-type immune response e.g.
 CC allergy, allergy-induced asthma or an infectious disease; for increasing
 CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
 CC are also useful for immunomodulation of cells and individuals; in the
 CC fields of biomedicine and immunology; for the manufacture of a medicament
 CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
 CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
 CC ameliorating an Igs-related disorder in an individual. The disorders
 CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
 CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
 CC cancer; infectious disease resistant to humoral immune responses (e.g.
 CC diseases caused by mycobacterial infections and intracellular pathogens,
 CC cellular pathogens e.g. bacteria or protozoans or by subcellular
 CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
 CC leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases
 CC caused by intracellular parasites such as malaria; leishmaniasis,
 CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
 CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
 CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
 CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.
 XX
 SQ Sequence 10 BP; 2 A; 2 C; 3 G; 3 T; 0 U; 0 Other;
 Query Match 68.0%; Score 6.8; DB 12; Length 10;
 Best Local Similarity 66.7%; Pred. No. 2e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
 QY 2 DANCCKTCG 10
 Db :|||:|
 2 GAACGTCG 10
 RESULT 95
 ADQ95279
 ID ADQ95279 standard; DNA; 10 BP.
 AC ADQ95279;
 XX
 XX 07-OCT-2004 (first entry)
 DT
 DE Branched immunomodulatory compound related oligonucleotide, SEQ ID 21.
 XX
 XX Antiallergic; Antiasthmatic; Antibacterial; Immunomodulatory; Respiratory;
 KW Virucide; Antiinflammatory; Hepatotrophic; Anti-HIV; Auditory;
 KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
 KW Tuberculosis; Antileprotic; Antiparasitic; Antimalarial; Antitumor;
 KW Gastrointestinal; Nephrotropic; branched immunomodulatory compound;
 KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
 KW IFN-alpha; ss.
 XX
 OS Synthetic.

XX WO2004058159-A2.
 XX
 XX 15-JUL-2004.
 XX
 XX 17-DEC-2003; 2003WO-US040417.
 XX
 XX 23-DEC-2002; 2002US-0436406P.
 XX
 XX (DYNA-) DYNAXVAX TECHNOLOGIES CORP.
 XX
 XX Fearon KL;
 XX WPI; 2004-561515/54.
 XX New branched immunomodulatory compound comprising at least three nucleic
 PT acid moieties and at least one branch-point nucleoside, useful for
 PT modulating an immune response in individual suffering e.g. allergy.
 XX
 PS Disclosure; SEQ ID NO 21; 183pp; English.
 XX
 CC The present invention relates to novel branched immunomodulatory
 CC compounds (BIC) comprising at least three nucleic acid moieties, at least
 CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
 CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
 CC e.g. the ability to stimulate interferon (IFN)-gamma production from
 CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
 CC alpha production from human peripheral blood mononuclear cells and the
 CC ability to stimulate B cell proliferation. The BIC compounds are useful
 CC for modulating an immune response in an individual suffering from a
 CC disorder associated with a T helper (Th)2-type immune response e.g.
 CC allergy, allergy-induced asthma or an infectious disease; for increasing
 CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
 CC are also useful for immunomodulation of cells and individuals; in the
 CC fields of biomedicine and immunology; for the manufacture of a medicament
 CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
 CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
 CC ameliorating an Igs-related disorder in an individual. The disorders
 CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
 CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
 CC cancer; infectious disease resistant to humoral immune responses (e.g.
 CC diseases caused by mycobacterial infections and intracellular pathogens,
 CC cellular pathogens e.g. bacteria or protozoans or by subcellular
 CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
 CC leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases
 CC caused by intracellular parasites such as malaria; leishmaniasis,
 CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
 CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
 CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
 CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.
 XX
 SQ Sequence 10 BP; 2 A; 2 C; 2 G; 2 T; 2 U; 0 Other;
 Query Match 68.0%; Score 6.8; DB 12; Length 10;
 Best Local Similarity 66.7%; Pred. No. 2e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
 QY 2 DANCCKTCG 10
 Db :|||:|
 2 UAACGTCG 10
 RESULT 96
 ADQ95280
 ID ADQ95280 standard; DNA; 10 BP.
 XX
 XX ADQ95280;
 AC
 XX
 XX 07-OCT-2004 (first entry)
 DT
 DE Branched immunomodulatory compound related oligonucleotide, SEQ ID 22.
 XX

KW Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
 KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
 KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
 KW Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Antiulcer;
 KW Gastrointestinal; Nephrotropic; branched immunomodulatory compound;
 KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
 KW IFN-alpha; ss.
 XX
 XX Synthetic.
 OS
 XX
 XX W02004058159-A2.
 PN
 XX
 XX 15-JUL-2004.
 PD
 XX
 XX 17-DEC-2003; 2003WO-US040417.
 PF
 XX
 XX 23-DEC-2002; 2002US-0436406P.
 PR
 XX
 XX (DYNA-) DYNAVAX TECHNOLOGIES CORP.
 PA
 XX Fearon KL;
 XX
 XX WPI; 2004-561515/54.
 DR
 XX
 XX New branched immunomodulatory compound comprising at least three nucleic
 PT acid moieties and at least one branch-point nucleoside, useful for
 PT modulating an immune response in individual suffering e.g. allergy.
 PT
 XX
 XX Disclosure; SEQ ID NO 22; 183pp; English.
 PS
 XX
 XX The present invention relates to novel branched immunomodulatory
 CC compounds (BIC) comprising at least three nucleic acid moieties, at least
 CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
 CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
 CC e.g. the ability to stimulate interferon (IFN)-gamma production from
 CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
 CC alpha production from human peripheral blood mononuclear cells and the
 CC ability to stimulate B cell proliferation. The BIC compounds are useful
 CC for modulating an immune response in an individual suffering from a
 CC disorder associated with a T helper (Th) 2-type immune response e.g.
 CC allergy, allergy-induced asthma or an infectious disease; for increasing
 CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
 CC are also useful for immunomodulation of cells and individuals; in the
 CC fields of biomedicine and immunology; for the manufacture of a medicament
 CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
 CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
 CC ameliorating an IGE-related disorder in an individual. The disorders
 CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
 CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
 CC cancer; infectious disease resistant to humoral immune responses (e.g.
 CC cancer; infectious disease resistant to humoral immune responses (e.g.
 CC diseases caused by mycobacterial infections and intracellular pathogens,
 CC cellular pathogens e.g. bacteria or protozoans or by subcellular
 CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
 CC leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases
 CC caused by intracellular parasites such as malaria; leishmaniasis,
 CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
 CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
 CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
 CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.
 XX
 XX Sequence 10 BP; 2 A; 2 C; 2 G; 4 T; 0 U; 0 Other;
 SQ
 Query Match 68.0%; Score 6.8; DB 12; Length 10;
 Best Local Similarity 66.7%; Pred. No. 2e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
 QY 2 DANCGETCG 10
 Db 2 TACGGTCG 10
 RESULT 97

ADQ95316
 ID ADQ95316 standard; DNA; 10 BP.
 XX
 AC ADQ95316;
 XX
 DT 07-OCT-2004 (first entry)
 XX
 XX Branched immunomodulatory compound related oligonucleotide, SEQ ID 58.
 DE
 XX
 XX Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
 KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
 KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
 KW Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Antiulcer;
 KW Gastrointestinal; Nephrotropic; branched immunomodulatory compound;
 KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
 KW IFN-alpha; ss.
 XX
 XX Synthetic.
 OS
 XX
 XX Key Location/Qualifiers
 FH modified_base 5 /*tag= a
 FT /mod_base= OTHER
 FT /note= "C= 5-bromocytosine"
 FT
 XX W02004058159-A2.
 PN
 XX
 XX 15-JUL-2004.
 PD
 XX
 XX 17-DEC-2003; 2003WO-US040417.
 PF
 XX
 XX 23-DEC-2002; 2002US-0436406P.
 PR
 XX
 XX (DYNA-) DYNAVAX TECHNOLOGIES CORP.
 PA
 XX Fearon KL;
 XX
 XX WPI; 2004-561515/54.
 DR
 XX
 XX New branched immunomodulatory compound comprising at least three nucleic
 PT acid moieties and at least one branch-point nucleoside, useful for
 PT modulating an immune response in individual suffering e.g. allergy.
 PT
 XX
 XX Disclosure; SEQ ID NO 58; 183pp; English.
 PS
 XX
 XX The present invention relates to novel branched immunomodulatory
 CC compounds (BIC) comprising at least three nucleic acid moieties, at least
 CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
 CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
 CC e.g. the ability to stimulate interferon (IFN)-gamma production from
 CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
 CC alpha production from human peripheral blood mononuclear cells and the
 CC ability to stimulate B cell proliferation. The BIC compounds are useful
 CC for modulating an immune response in an individual suffering from a
 CC disorder associated with a T helper (Th) 2-type immune response e.g.
 CC allergy, allergy-induced asthma or an infectious disease; for increasing
 CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
 CC are also useful for immunomodulation of cells and individuals; in the
 CC fields of biomedicine and immunology; for the manufacture of a medicament
 CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
 CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
 CC ameliorating an IGE-related disorder in an individual. The disorders
 CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
 CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
 CC cancer; infectious disease resistant to humoral immune responses (e.g.
 CC cancer; infectious disease resistant to humoral immune responses (e.g.
 CC diseases caused by mycobacterial infections and intracellular pathogens,
 CC cellular pathogens e.g. bacteria or protozoans or by subcellular
 CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
 CC leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases
 CC caused by intracellular parasites such as malaria; leishmaniasis,
 CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
 CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
 CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
 CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.
 XX
 XX Sequence 10 BP; 2 A; 2 C; 2 G; 4 T; 0 U; 0 Other;
 SQ

CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
CC the BIC compounds of the invention.
XX
SQ Sequence 10 BP; 1 A; 2 C; 4 G; 3 T; 0 U; 0 Other;
Query Match 68.0%; Score 6.8; DB 12; Length 10;
Best Local Similarity 66.7%; Pred. No. 2e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
QY 2 DANCCKTCG 10
Db 2 TATCGGTCG 10
RESULT 98
ADQ95324
ID ADQ95324 standard; DNA; 10 BP.
XX
XX
AC ADQ95324;
DT 07-OCT-2004 (first entry)
DE Branched immunomodulatory compound related oligonucleotide, SEQ ID 66.
XX
KW Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
KW Virucide; Antiinflammatory; Hepatotrophic; Anti-HIV; Auditory;
KW Dermatologic; Immunosuppressive; Cytostatic; Protozoacide; Antitumor;
KW Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Antitumor;
KW Gastrointestinal; Nephrotrophic; Branched immunomodulatory compound;
KW Immunomodulatory; Interferon-gamma; IFN-gamma; Interferon-alpha;
IFN-alpha; ss.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 5 /*tag= a
FT /mod_base= OTHER
FT /note= "c= 5-bromocytosine"
XX
XX WO2004058159-A2.
XX
XX 15-JUL-2004.
XX
XX 17-DEC-2003; 2003WO-US040417.
XX
XX 23-DEC-2002; 2002US-0436406P.
XX
XX (DYNA-) DYNAX TECHNOLOGIES CORP.
XX
XX Fearon KL;
XX
XX WPI; 2004-561515/54.
XX
XX New branched immunomodulatory compound comprising at least three nucleic
PT acid moieties and at least one branch-point nucleoside, useful for
PT modulating an immune response in individual suffering e.g. allergy.
XX
XX Disclosure; SEQ ID NO 66; 183pp; English.
XX
XX The present invention relates to novel branched immunomodulatory
CC compounds (BIC) comprising at least three nucleic acid moieties, at least
CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
CC e.g. the ability to stimulate interferon (IFN)-gamma production from
CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
CC alpha production from human peripheral blood mononuclear cells and the
CC ability to stimulate B cell proliferation. The BIC compounds are useful
CC for modulating an immune response in an individual suffering from a
CC disorder associated with a T helper (Th)2-type immune response e.g.
CC allergy, allergy-induced asthma or an infectious disease; for increasing
CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
CC are also useful for immunomodulation of cells and individuals; in the

CC fields of biomedicine and immunology; for the manufacture of a medicament
CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
CC ameliorating an Igs-related disorder in an individual. The disorders
CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
CC cancer; infectious disease resistant to humoral immune responses (e.g.
CC diseases caused by mycobacterial infections and intracellular pathogens,
CC cellular pathogens e.g. bacteria or protozoans or by subcellular
CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
CC leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases
CC caused by intracellular parasites such as malaria; leishmaniasis,
CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
CC the BIC compounds of the invention.
XX
SQ Sequence 10 BP; 2 A; 2 C; 2 G; 3 T; 1 U; 0 Other;
Query Match 68.0%; Score 6.8; DB 12; Length 10;
Best Local Similarity 66.7%; Pred. No. 2e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
QY 2 DANCCKTCG 10
Db 2 TATCGGTCG 10
RESULT 99
ABQ75244
ID ABQ75244 standard; DNA; 11 BP.
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XX ABQ75244;
XX
XX 05-NOV-2002 (first entry)
XX
XX ISS immunomodulatory oligonucleotide SEQ ID NO:116.
XX
KW Immunostimulatory sequence; ISS: immunomodulatory; immune response;
KW allergy; asthma; infectious disease; interferon-gamma; IFN-gamma;
KW idiopathic pulmonary fibrosis; viral infection; mycobacterial disease;
KW malaria; leishmaniasis; toxoplasmosis; schistosomiasis; clonorchiasis;
KW immunoglobulin E; Igs-related disorder; antiallergic; antiasthmatic;
KW virucide; antibacterial; protozoacide; ss.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 2 /*tag= a
FT /mod_base= OTHER
FT /note= "5-bromocytosine"
XX
XX WO200252002-A2.
XX
XX 04-JUL-2002.
XX
XX 27-DEC-2001; 2001WO-US050821.
XX
XX 27-DEC-2000; 2000US-0258675P.
XX
XX (DYNA-) DYNAX TECHNOLOGIES CORP.
XX
XX Fearon KL; Dina D;
XX WPI; 2002-657426/70.
XX
XX Immunomodulatory polynucleotide for modulating an immune response in a
PT subject suffering from disorders associated with Th2-type immune
PT response, e.g. allergy, or infectious disease, comprises an
PT immunostimulatory sequence.
XX

PS Disclosure; Page 25; 95pp; English.

XX The present invention describes an immunomodulatory polynucleotide (I) comprising an immunostimulatory sequence (ISS). Also described: (1) an immunomodulatory composition comprising (I); (2) an immunomodulatory polynucleotide/microcarrier (IMP/MC) complex, comprising (I) linked to a biodegradable MC, where the MC is less than 10 micrometre in size; and (3) a kit comprising (I). (I) has anti-allergic, antiasthmatic, virucide, antibacterial and protozoacide activities, and can be used as a modulator of immune response. (I) is useful for modulating an immune response in an individual suffering from disorders associated with a Th2-type immune response, especially an allergy or asthma, or an infectious disease. (I) is also useful for increasing interferon-gamma (IFN-gamma) in an individual having idiopathic pulmonary fibrosis, or IFN-alpha in an individual having a viral infection. (I) is further useful for ameliorating a symptom of an infectious disease caused by a cellular pathogen such as mycobacterial disease, malaria, leishmaniasis, toxoplasmosis, schistosomiasis and clonorchiasis in an individual, or a symptom of an immunoglobulin E (IgE)-related disorder, preferably an allergy-related disorder, in particular asthma in an individual. The present sequence represents an immunomodulatory oligonucleotide from the present invention

XX
SQ Sequence 11 BP; 1 A; 3 C; 3 G; 3 T; 0 U; 1 Other;

Query Match 68.0%; Score 6.8; DB 6; Length 11;
Best Local Similarity 66.7%; Pred. No. 2e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANGKTCG 10
: |||||
Db 3 GACCGTTCG 11

RESULT:100

ABQ75229
ID ABQ75229 standard; DNA; 11 BP.

XX AC ABQ75229;

XX DT 05-NOV-2002 (first entry)

XX DE ISS immunomodulatory oligonucleotide SEQ ID NO:102.

XX KW Immunostimulatory sequence; ISS: immunomodulatory; immune response; allergy; asthma; infectious disease; interferon-gamma; IFN-gamma; idiopathic pulmonary fibrosis; viral infection; mycobacterial disease; malaria; leishmaniasis; toxoplasmosis; schistosomiasis; clonorchiasis; immunoglobulin E; IgE-related disorder; anti-allergic; antiasthmatic; virucide; antibacterial; protozoacide; ss.

XX OS Synthetic.

XX PN WO200252002-A2.

XX PD 04-JUL-2002.

XX PF 27-DEC-2001; 2001WO-US050821.

XX PR 27-DEC-2000; 2000US-0258675P.

XX PA (DYNA-) DYNAVAX TECHNOLOGIES CORP.

XX PI Fearon KL, Dina D;

XX DR WPI; 2002-657426/70.

XX PT Immunomodulatory polynucleotide for modulating an immune response in a subject suffering from disorders associated with Th2-type immune response, e.g. allergy, or infectious disease, comprises an immunostimulatory sequence.

XX PS Disclosure; Page 24; 95pp; English.

XX

CC The present invention describes an immunomodulatory polynucleotide (I) comprising an immunostimulatory sequence (ISS). Also described: (1) an immunomodulatory composition comprising (I); (2) an immunomodulatory polynucleotide/microcarrier (IMP/MC) complex, comprising (I) linked to a biodegradable MC, where the MC is less than 10 micrometre in size; and (3) a kit comprising (I). (I) has anti-allergic, antiasthmatic, virucide, antibacterial and protozoacide activities, and can be used as a modulator of immune response. (I) is useful for modulating an immune response in an individual suffering from disorders associated with a Th2-type immune response, especially an allergy or asthma, or an infectious disease. (I) is also useful for increasing interferon-gamma (IFN-gamma) in an individual having idiopathic pulmonary fibrosis, or IFN-alpha in an individual having a viral infection. (I) is further useful for ameliorating a symptom of an infectious disease caused by a cellular pathogen such as mycobacterial disease, malaria, leishmaniasis, toxoplasmosis, schistosomiasis and clonorchiasis in an individual, or a symptom of an immunoglobulin E (IgE)-related disorder, preferably an allergy-related disorder, in particular asthma in an individual. The present sequence represents an immunomodulatory oligonucleotide from the present invention

XX
SQ Sequence 11 BP; 2 A; 3 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 68.0%; Score 6.8; DB 6; Length 11;
Best Local Similarity 66.7%; Pred. No. 2e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANGKTCG 10
: |||||
Db 3 GACCGTTCG 11

Search completed: June 30, 2005, 00:38:19
Job time : 221.5 secs

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GenCore version 5.1.6
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OM nucleic - nucleic search, using sw model

Run on: June 29, 2005, 23:58:44 ; Search time 70.5 Seconds
(without alignments)
232.096 Million cell updates/sec

Title: US-10-033-243-62
Perfect score: 10
Sequence: 1 ndancqktcq 10

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 1202784 seqs, 818138359 residues

Total number of hits satisfying chosen parameters: 2405568

Minimum DB seq length: 0

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Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 100 summaries

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB	ID	Description	
1	6.8	68.0	12	3	US-09-054-832-6	Sequence 6, Appli	
2	6.8	68.0	12	4	US-09-640-953-6	Sequence 6, Appli	
3	6.8	68.0	12	4	US-09-738-444A-42	Sequence 42, Appli	
4	6.8	68.0	14	3	US-08-954-210-13	Sequence 13, Appli	
5	6.8	68.0	14	3	US-08-879-078B-4	Sequence 4, Appli	
6	6.8	68.0	14	3	US-09-431-419A-13	Sequence 13, Appli	
7	6.8	68.0	15	1	US-08-182-968A-37	Sequence 27, Appli	
8	6.8	68.0	15	1	US-08-182-968A-331	Sequence 331, App	
9	6.8	68.0	15	1	US-08-182-968A-332	Sequence 332, App	
10	6.8	68.0	15	2	US-08-774-306A-27	Sequence 27, Appli	
11	6.8	68.0	15	2	US-08-774-306A-331	Sequence 331, App	
12	6.8	68.0	15	2	US-08-774-306A-332	Sequence 332, App	
13	6.8	68.0	15	3	US-08-954-210-12	Sequence 12, Appli	
14	6.8	68.0	15	3	US-09-064-156A-27	Sequence 27, Appli	
15	6.8	68.0	15	3	US-09-064-156A-331	Sequence 331, App	
16	6.8	68.0	15	3	US-09-064-156A-332	Sequence 332, App	
C 17	6.8	68.0	15	3	US-09-206-866-5	Sequence 5, Appli	
C 18	6.8	68.0	15	3	US-09-206-866-6	Sequence 6, Appli	
C 19	6.8	68.0	15	3	US-09-206-866-7	Sequence 7, Appli	
C 20	6.8	68.0	15	3	US-09-206-866-8	Sequence 8, Appli	
C 21	6.8	68.0	15	3	US-09-206-866-9	Sequence 9, Appli	
C 22	6.8	68.0	15	3	US-09-206-866-10	Sequence 10, Appli	
C 23	6.8	68.0	15	3	US-09-332-319-7	Sequence 7, Appli	
C 24	6.8	68.0	15	3	US-09-332-319-8	Sequence 8, Appli	
C 25	6.8	68.0	15	3	US-09-332-319-9	Sequence 9, Appli	
C 26	6.8	68.0	15	3	US-09-206-866A-5	Sequence 5, Appli	
C 27	6.8	68.0	15	3	US-09-206-866A-6	Sequence 6, Appli	

ALIGNMENTS

RESULT 1
US-09-054-832-6
; Sequence 6, Application US/09054832
; Patent No. 6312894
; GENERAL INFORMATION:
; APPLICANT: Meyer, Rich
; TITLE OF INVENTION: IMPROVED HYBRIDIZATION AND
; MISMATCH DISCRIMINATION USING OLIGONUCLEOTIDES
; TITLE OF INVENTION: CONJUGATED TO MINOR GROOVE BINDERS
; NUMBER OF SEQUENCES: 40
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MORRISON & FOERSTER
; STREET: 755 PAGE MILL ROAD
; CITY: PALO ALTO
; STATE: CA
; COUNTRY: USA
; ZIP: 94304-1018
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; OPERATING SYSTEM: Windows
; SOFTWARE: FastSeq for Windows Version 2.0b
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/054,832
; FILING DATE: 03-APR-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Brennan, Sean M
; REGISTRATION NUMBER: 39,917
; REFERENCE/DOCKET NUMBER: 34469-20004.20
; TELEPHONE: 650-813-5600
; TELEFAX: 650-494-0792
; TELEX: 706141
; INFORMATION FOR SEQ ID NO: 6:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 12 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/415,370
; FILING DATE: 03-APR-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Brennan, Sean M
; REGISTRATION NUMBER: 39,917
; REFERENCE/DOCKET NUMBER: 34469-20004.20
; TELEPHONE: 650-813-5600
; TELEFAX: 650-494-0792
; TELEX: 706141
; INFORMATION FOR SEQ ID NO: 6:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 12 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
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Best Local Similarity 66.7%; Pred. No. 4e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
QY 2 DANCCKTCG 10
; : |||: |||
Db 1AA TAACGTTGG 12

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; Sequence 6, Application US/09640953
; Patent No. 6492346
; GENERAL INFORMATION:
; APPLICANT: Meyer, Rich
; TITLE OF INVENTION: IMPROVED HYBRIDIZATION AND
; MISMATCH DISCRIMINATION USING OLIGONUCLEOTIDES
; CONJUGATED TO MINOR GROOVE BINDERS
; NUMBER OF SEQUENCES: 40
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MORRISON & FOERSTER
; STREET: 755 PAGE MILL ROAD
; CITY: PALO ALTO
; STATE: CA
; COUNTRY: USA
; ZIP: 94304-1018
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; OPERATING SYSTEM: Windows
; SOFTWARE: FastSeq for Windows Version 2.0b
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/054,832
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/415,370
; FILING DATE: 03-APR-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Brennan, Sean M
; REGISTRATION NUMBER: 39,917
; REFERENCE/DOCKET NUMBER: 34469-20004.20
; TELEPHONE: 650-813-5600
; TELEFAX: 650-494-0792
; TELEX: 706141
; INFORMATION FOR SEQ ID NO: 6:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 12 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
US-09-054-832-6
Query Match 68.0%; Score 6.8; DB 3; Length 12;
Best Local Similarity 66.7%; Pred. No. 4e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
QY 2 DANCCKTCG 10
; : |||: |||
Db 1AA TAACGTTGG 12

RESULT 3
US-09-738-444A-42/c
; Sequence 42, Application US/09738444A
; Patent No. 6660475
; GENERAL INFORMATION:
; APPLICANT: Jack, William E.
; APPLICANT: Schildkraut, Ira
; APPLICANT: Menin, Julie F.
; TITLE OF INVENTION: Use of Site-Specific Nicking Endonucleases to Create
; TITLE OF INVENTION: Single-Stranded Regions And Applications Thereof
; FILE REFERENCE: NEB-180
; CURRENT APPLICATION NUMBER: US/09/738,444A
; CURRENT FILING DATE: 2000-12-15
; NUMBER OF SEQ ID NOS: 51
; SOFTWARE: Patent in Ver. 2.0
; SEQ ID NO 42
; LENGTH: 12
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Theoretical
; OTHER INFORMATION: sequence - randomly generated
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Best Local Similarity 66.7%; Pred. No. 4e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
QY 2 DANCCKTCG 10
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; OTHER INFORMATION: Description of Artificial Sequence:
; NAME/KEY: misc_feature
; LOCATION: (14)
; OTHER INFORMATION: n stands for 3'-3' inverted thymidine
US-08-879-078B-4

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Best Local Similarity 55.6%; Pred. No. 4e+04;
Matches 5; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY      2 DANCCKTCG 10
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Db      4 UACCGGUCG 12

RESULT 6
US-09-431-419A-13
; Sequence 13, Application US/09431419A
; Patent No. 6458567
; GENERAL INFORMATION:
; APPLICANT: Barber, Jack R.
; APPLICANT: Welch, Peter J.
; APPLICANT: Tritz, Richard
; APPLICANT: Yei, Soonpin
; APPLICANT: Yu, Mang
; TITLE OF INVENTION: HEPATITIS C VIRUS RIBOZYMES
; FILE REFERENCE: 480124.403C3
; CURRENT APPLICATION NUMBER: US/09/431,419A
; CURRENT FILING DATE: 1999-11-01
; NUMBER OF SEQ ID NOS: 73
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 13
; LENGTH: 14
; TYPE: DNA
; ORGANISM: Hepatitis C Virus
US-09-431-419A-13

Query Match      68.0%; Score 6.8; DB 3; Length 14;
Best Local Similarity 55.6%; Pred. No. 4e+04;
Matches 5; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY      2 DANCCKTCG 10
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Db      1 GACCGGUCG 9

RESULT 7
US-08-182-968A-27
; Sequence 27, Application US/08182968A
; Patent No. 5610054
; GENERAL INFORMATION:
; APPLICANT: Draper, Kenneth G.
; TITLE OF INVENTION: METHOD AND REAGENT FOR
; TITLE OF INVENTION: INHIBITING HEPATITIS C
; TITLE OF INVENTION: VIRUS REPLICATION
; NUMBER OF SEQUENCES: 497
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Lyon & Lyon
; STREET: 633 West Fifth Street
; CITY: Los Angeles
; STATE: California
; COUNTRY: U.S.A.
; ZIP: 90071-2066
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
; MEDIUM TYPE: storage
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: IBM P.C. DOS 5.0
; SOFTWARE: Word Perfect 5.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/182,968A
```

;; FILING DATE: 13-JANUARY-1994
;; PRIOR APPLICATION NUMBER: 07/882,888
;; FILING DATE: 14-MAY-1992
;; ATTORNEY/AGENT INFORMATION:
;; NAME: Warburg, Richard J.
;; REGISTRATION NUMBER: 32,327
;; REFERENCE/DOCKET NUMBER: 205/277
;; TELECOMMUNICATION INFORMATION:
;; TELEPHONE: (213) 489-1600
;; TELEFAX: (213) 955-0440
;; TELEX: 67-3510
;; INFORMATION FOR SEQ ID NO: 27:
;; SEQUENCE CHARACTERISTICS:
;; LENGTH: 15
;; TYPE: nucleic acid
;; STRANDEDNESS: single
;; TOPOLOGY: linear
US-08-182-968A-27

Query Match 68.0%; Score 6.8; DB 1; Length 15;
Best Local Similarity 55.6%; Pred. No. 4e+04;
Matches 5; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
Db 1 GAACGGUCG 9

RESULT 8
US-08-182-968A-331
; Sequence 331, Application US/08182968A
; Patent No. 5610054
; GENERAL INFORMATION:
; APPLICANT: Draper, Kenneth G.
; TITLE OF INVENTION: METHOD AND REAGENT FOR
; TITLE OF INVENTION: INHIBITING HEPATITIS C
; TITLE OF INVENTION: VIRUS REPLICATION
; NUMBER OF SEQUENCES: 497
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Lyon & Lyon
; STREET: 633 West Fifth Street
; CITY: Los Angeles
; STATE: California
; COUNTRY: U.S.A.
; ZIP: 90071-2066
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: IBM P.C. DOS 5.0
; SOFTWARE: Word Perfect 5.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/182,968A
; FILING DATE: 13-JANUARY-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 07/882,888
; FILING DATE: 14-MAY-1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Warburg, Richard J.
; REGISTRATION NUMBER: 32,327
; REFERENCE/DOCKET NUMBER: 205/277
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (213) 489-1600
; TELEFAX: (213) 955-0440
; TELEX: 67-3510
; INFORMATION FOR SEQ ID NO: 31:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 15
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear

US-08-182-968A-331

Query Match 68.0%; Score 6.8; DB 1; Length 15;
Best Local Similarity 55.6%; Pred. No. 4e+04;
Matches 5; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
Db 2 UAACGGUUCG 10

RESULT 9
US-08-182-968A-332
; Sequence 332, Application US/08182968A
; Patent No. 5610054
; GENERAL INFORMATION:
; APPLICANT: Draper, Kenneth G.
; TITLE OF INVENTION: METHOD AND REAGENT FOR
; TITLE OF INVENTION: INHIBITING HEPATITIS C
; TITLE OF INVENTION: VIRUS REPLICATION
; NUMBER OF SEQUENCES: 497
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Lyon & Lyon
; STREET: 633 West Fifth Street
; CITY: Los Angeles
; STATE: California
; COUNTRY: U.S.A.
; ZIP: 90071-2066
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: IBM P.C. DOS 5.0
; SOFTWARE: Word Perfect 5.1
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/182,968A
; FILING DATE: 13-JANUARY-1994
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 07/882,888
; FILING DATE: 14-MAY-1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Warburg, Richard J.
; REGISTRATION NUMBER: 32,327
; REFERENCE/DOCKET NUMBER: 205/277
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (213) 489-1600
; TELEFAX: (213) 955-0440
; TELEX: 67-3510
; INFORMATION FOR SEQ ID NO: 332:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 15
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
US-08-182-968A-332

Query Match 68.0%; Score 6.8; DB 1; Length 15;
Best Local Similarity 55.6%; Pred. No. 4e+04;
Matches 5; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
Db 1 UAACGGUUCG 9

RESULT 10
US-08-774-306A-27
; Sequence 27, Application US/08774306A
; Patent No. 5869253
; GENERAL INFORMATION:
; APPLICANT: Draper, Kenneth G.
; TITLE OF INVENTION: METHOD AND REAGENT FOR

;; TITLE OF INVENTION: INHIBITING HEPATITIS C
;; TITLE OF INVENTION: VIRUS REPLICATION
;; NUMBER OF SEQUENCES: 497
;; CORRESPONDENCE ADDRESS:
;; ADDRESSEE: Lyon & Lyon
;; STREET: 633 West Fifth Street
;; CITY: Suite 4700
;; STATE: Los Angeles
;; COUNTRY: California
;; ZIP: 90071-2066
;; COMPUTER READABLE FORM:
;; MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
;; MEDIUM TYPE: storage
;; COMPUTER: IBM Compatible
;; OPERATING SYSTEM: IBM P.C. DOS 5.0
;; SOFTWARE: Word Perfect 5.1
;; CURRENT APPLICATION DATA:
;; APPLICATION NUMBER: US/08/774,306A
;; FILING DATE: December 26, 1996
;; PRIOR APPLICATION DATA:
;; APPLICATION NUMBER: 08/182,968
;; FILING DATE: January 13, 1994
;; APPLICATION NUMBER: 07/882,888
;; FILING DATE: May 14, 1992
;; ATTORNEY/AGENT INFORMATION:
;; NAME: Warburg, Richard J.
;; REGISTRATION NUMBER: 32,327
;; REFERENCE/DOCKET NUMBER: 223/227
;; TELEPHONE: (213) 489-1600
;; TELEFAX: (213) 955-0440
;; INFORMATION FOR SEQ ID NO: 27:
;; SEQUENCE CHARACTERISTICS:
;; LENGTH: 15
;; TYPE: nucleic acid
;; STRANDEDNESS: single
;; TOPOLOGY: linear
US-08-774-306A-27

Query Match 68.0%; Score 6.8; DB 2; Length 15;
Best Local Similarity 55.6%; Pred. No. 4e+04;
Matches 5; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
Db 1 GAACGGUCG 9

RESULT 11
US-08-774-306A-331
;; Sequence 331, Application US/08/774306A
;; Patent No. 5869253
;; GENERAL INFORMATION:
;; APPLICANT: Draper, Kenneth G.
;; TITLE OF INVENTION: METHOD AND REAGENT FOR
;; TITLE OF INVENTION: INHIBITING HEPATITIS C
;; NUMBER OF SEQUENCES: 497
;; CORRESPONDENCE ADDRESS:
;; ADDRESSEE: Lyon & Lyon
;; STREET: 633 West Fifth Street
;; CITY: Suite 4700
;; STATE: Los Angeles
;; COUNTRY: California
;; ZIP: 90071-2066
;; COMPUTER READABLE FORM:
;; MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
;; MEDIUM TYPE: storage
;; COMPUTER: IBM Compatible
;; OPERATING SYSTEM: IBM P.C. DOS 5.0

;; SOFTWARE: Word Perfect 5.1
;; CURRENT APPLICATION DATA:
;; APPLICATION NUMBER: US/08/774,306A
;; FILING DATE: December 26, 1996
;; PRIOR APPLICATION DATA:
;; APPLICATION NUMBER: 08/182,968
;; FILING DATE: January 13, 1994
;; APPLICATION NUMBER: 07/882,888
;; FILING DATE: May 14, 1992
;; ATTORNEY/AGENT INFORMATION:
;; NAME: Warburg, Richard J.
;; REGISTRATION NUMBER: 32,327
;; REFERENCE/DOCKET NUMBER: 223/227
;; TELEPHONE: (213) 489-1600
;; TELEFAX: (213) 955-0440
;; INFORMATION FOR SEQ ID NO: 331:
;; SEQUENCE CHARACTERISTICS:
;; LENGTH: 15
;; TYPE: nucleic acid
;; STRANDEDNESS: single
;; TOPOLOGY: linear
US-08-774-306A-331

Query Match 68.0%; Score 6.8; DB 2; Length 15;
Best Local Similarity 55.6%; Pred. No. 4e+04;
Matches 5; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
Db 2 UAGCGUUCG 10

RESULT 12
US-08-774-306A-332
;; Sequence 332, Application US/08/774306A
;; Patent No. 5869253
;; GENERAL INFORMATION:
;; APPLICANT: Draper, Kenneth G.
;; TITLE OF INVENTION: METHOD AND REAGENT FOR
;; TITLE OF INVENTION: INHIBITING HEPATITIS C
;; NUMBER OF SEQUENCES: 497
;; CORRESPONDENCE ADDRESS:
;; ADDRESSEE: Lyon & Lyon
;; STREET: 633 West Fifth Street
;; CITY: Suite 4700
;; STATE: Los Angeles
;; COUNTRY: California
;; ZIP: 90071-2066
;; COMPUTER READABLE FORM:
;; MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
;; MEDIUM TYPE: storage
;; COMPUTER: IBM Compatible
;; OPERATING SYSTEM: IBM P.C. DOS 5.0
;; SOFTWARE: Word Perfect 5.1
;; CURRENT APPLICATION DATA:
;; APPLICATION NUMBER: US/08/774,306A
;; FILING DATE: December 26, 1996
;; PRIOR APPLICATION DATA:
;; APPLICATION NUMBER: 08/182,968
;; FILING DATE: January 13, 1994
;; APPLICATION NUMBER: 07/882,888
;; FILING DATE: May 14, 1992
;; ATTORNEY/AGENT INFORMATION:
;; NAME: Warburg, Richard J.
;; REGISTRATION NUMBER: 32,327
;; REFERENCE/DOCKET NUMBER: 223/227
;; TELEPHONE: (213) 489-1600
;; TELEFAX: (213) 955-0440

[illegible]

ZIP: 90071-2066
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
MEDIUM TYPE: storage
COMPUTER: IBM Compatible
OPERATING SYSTEM: IBM P.C. DOS 5.0
SOFTWARE: Word Perfect 5.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/064,156A
FILING DATE: April 21, 1998
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/774,306
FILING DATE: December 26, 1996
APPLICATION NUMBER: 08/182,968
FILING DATE: January 13, 1994
APPLICATION NUMBER: 07/882,888
FILING DATE: May 14, 1992
ATTORNEY/AGENT INFORMATION:
NAME: Warburg, Richard J.
REGISTRATION NUMBER: 32,327
REFERENCE/DOCKET NUMBER: 234/083
TELEPHONE: (213) 489-1600
TELEFAX: (213) 955-0440
TELEX: 67-3510
INFORMATION FOR SEQ ID NO: 331:
SEQUENCE CHARACTERISTICS:
LENGTH: 15
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
US-09-064-156A-331

Query Match 68.0%; Score 6.8; DB 3; Length 15;
Best Local Similarity 55.6%; Pred. No. 4e+04;
Matches 5; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGRKTCG 10
:|::||
Db 2 UAGCGUUCG 10

RESULT 16
US-09-064-156A-332
Sequence 332, Application US/09064156A
Patent No. 6132966
GENERAL INFORMATION:
APPLICANT: Draper, Kenneth G.
TITLE OF INVENTION: METHOD AND REAGENT FOR
TITLE OF INVENTION: INHIBITING HEPATITIS C
TITLE OF INVENTION: VIRUS REPLICATION
NUMBER OF SEQUENCES: 498
CORRESPONDENCE ADDRESS:
ADDRESSEE: Lyon & Lyon
STREET: 633 West Fifth Street
STREET: Suite 4700
CITY: Los Angeles
STATE: California
COUNTRY: U.S.A.
ZIP: 90071-2066
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
MEDIUM TYPE: storage
COMPUTER: IBM Compatible
OPERATING SYSTEM: IBM P.C. DOS 5.0
SOFTWARE: Word Perfect 5.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/064,156A
FILING DATE: April 21, 1998
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/774,306
FILING DATE: December 26, 1996
APPLICATION NUMBER: 08/182,968

FILING DATE: January 13, 1994
APPLICATION NUMBER: 07/882,888
FILING DATE: May 14, 1992
ATTORNEY/AGENT INFORMATION:
NAME: Warburg, Richard J.
REGISTRATION NUMBER: 32,327
REFERENCE/DOCKET NUMBER: 234/083
TELEPHONE: (213) 489-1600
TELEFAX: (213) 955-0440
TELEX: 67-3510
INFORMATION FOR SEQ ID NO: 332:
SEQUENCE CHARACTERISTICS:
LENGTH: 15
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
US-09-064-156A-332

Query Match 68.0%; Score 6.8; DB 3; Length 15;
Best Local Similarity 55.6%; Pred. No. 4e+04;
Matches 5; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGRKTCG 10
:|::||
Db 1 UAGCGUUCG 9

RESULT 17
US-09-206-866-5/c
Sequence 5, Application US/09206866A
Patent No. 6150108
GENERAL INFORMATION:
APPLICANT: SZYF, Moshe
APPLICANT: BIGEY, Pascal
TITLE OF INVENTION: SPECIFIC INHIBITORS OF DNA METHYLTRANSFERASE
FILE REFERENCE: 106101.200
CURRENT APPLICATION NUMBER: US/09/206,866A
CURRENT FILING DATE: 1998-12-08
EARLIER APPLICATION NUMBER: US 08/653,954
EARLIER FILING DATE: 1996-05-22
EARLIER APPLICATION NUMBER: PCT/IB97/00879
EARLIER FILING DATE: 1997-05-22
EARLIER APPLICATION NUMBER: US 60/069,812
EARLIER FILING DATE: 1997-12-17
EARLIER APPLICATION NUMBER: US 09/194,284
EARLIER FILING DATE: 1998-11-23
NUMBER OF SEQ ID NOS: 41
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 5
LENGTH: 15
TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
NAME/KEY: misc feature
LOCATION: (1)..(14)
OTHER INFORMATION: Nucleotide 14 is n wherein n = i and i = inosine.
FEATURE:
NAME/KEY: misc feature
LOCATION: (1)..(15)
OTHER INFORMATION: Nucleotides 1-15 contain c, t, a & g wherein
OTHER INFORMATION: c=cytidine; t=thymidine; a=adenosine; g=guanosine.
FEATURE:
NAME/KEY: misc feature
LOCATION: (1)..(15)
OTHER INFORMATION: m is a methyl group at the 5-position of
OTHER INFORMATION: nucleotides 1, 5 and 10 of the cytosine portion of cytidine.
OTHER INFORMATION: Description of Artificial Sequence:synthetic
OTHER INFORMATION: construct
US-09-206-866-5

Query Match 68.0%; Score 6.8; DB 3; Length 15;

Best Local Similarity 66.7%; Pred. No. 4e+04; Mismatches 2; Indels 1; Gaps 0;

QY 2 DANCGRKTCG 10
: ||: ||
Db 9 AAACGTTTCG 1

RESULT 18

US-09-206-866-6/c
; Sequence 6, Application US/09206866A
; Patent No. 6150108
; GENERAL INFORMATION:
; APPLICANT: BIGEY, Pascal
; TITLE OF INVENTION: SPECIFIC INHIBITORS OF DNA METHYLTRANSFERASE
; FILE REFERENCE: 106101.200
; CURRENT APPLICATION NUMBER: US/09/206,866A
; CURRENT FILING DATE: 1998-12-08
; EARLIER APPLICATION NUMBER: US 08/653,954
; EARLIER FILING DATE: 1996-05-22
; EARLIER APPLICATION NUMBER: PCT/IB97/00879
; EARLIER FILING DATE: 1997-05-22
; EARLIER APPLICATION NUMBER: US 60/069,812
; EARLIER FILING DATE: 1997-12-17
; EARLIER APPLICATION NUMBER: US 09/194,284
; EARLIER FILING DATE: 1998-11-23
; NUMBER OF SEQ ID NOS: 41
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 6
; LENGTH: 15
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)..(14)
; OTHER INFORMATION: Nucleotide 14 is n wherein n = i and i = inosine.
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)..(15)
; OTHER INFORMATION: Nucleotides 1-15 contain c, t, a & g wherein
; OTHER INFORMATION: c=cytidine; t=thymidine; a=adenosine; g=guanosine;
; OTHER INFORMATION: m is a methyl group at the 5-position of
; OTHER INFORMATION: nucleotides 1 & 5 of the cytosine portion of
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:synthetic
; OTHER INFORMATION: construct
US-09-206-866-6

Query Match 68.0%; Score 6.8; DB 3; Length 15;
Best Local Similarity 66.7%; Pred. No. 4e+04; Mismatches 2; Indels 1; Gaps 0;
QY 2 DANCGRKTCG 10
: ||: ||
Db 9 AAACGTTTCG 1

RESULT 19

US-09-206-866-7/c
; Sequence 7, Application US/09206866A
; Patent No. 6150108
; GENERAL INFORMATION:
; APPLICANT: BIGEY, Pascal
; TITLE OF INVENTION: SPECIFIC INHIBITORS OF DNA METHYLTRANSFERASE
; FILE REFERENCE: 106101.200
; CURRENT APPLICATION NUMBER: US/09/206,866A
; CURRENT FILING DATE: 1998-12-08
; EARLIER APPLICATION NUMBER: US 08/653,954
; EARLIER FILING DATE: 1996-05-22
; EARLIER APPLICATION NUMBER: PCT/IB97/00879

; EARLIER FILING DATE: 1997-05-22
; EARLIER APPLICATION NUMBER: US 60/069,812
; EARLIER FILING DATE: 1997-12-17
; EARLIER APPLICATION NUMBER: US 09/194,284
; EARLIER FILING DATE: 1998-11-23
; NUMBER OF SEQ ID NOS: 41
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 7
; LENGTH: 15
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)..(14)
; OTHER INFORMATION: Nucleotide 14 is n wherein n = i and i = inosine.
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)..(15)
; OTHER INFORMATION: Nucleotides 1-15 contain c, t, a & g wherein
; OTHER INFORMATION: c=cytidine; t=thymidine; a=adenosine; g=guanosine;
; OTHER INFORMATION: m is a methyl group at the 5-position of
; OTHER INFORMATION: nucleotide 1 of the cytosine portion of cytidine.
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:synthetic
; OTHER INFORMATION: construct
US-09-206-866-7

Query Match 68.0%; Score 6.8; DB 3; Length 15;
Best Local Similarity 66.7%; Pred. No. 4e+04; Mismatches 2; Indels 1; Gaps 0;
QY 2 DANCGRKTCG 10
: ||: ||
Db 9 AAACGTTTCG 1

RESULT 20

US-09-206-866-8/c
; Sequence 8, Application US/09206866A
; Patent No. 6150108
; GENERAL INFORMATION:
; APPLICANT: BIGEY, Pascal
; TITLE OF INVENTION: SPECIFIC INHIBITORS OF DNA METHYLTRANSFERASE
; FILE REFERENCE: 106101.200
; CURRENT APPLICATION NUMBER: US/09/206,866A
; CURRENT FILING DATE: 1998-12-08
; EARLIER APPLICATION NUMBER: US 08/653,954
; EARLIER FILING DATE: 1996-05-22
; EARLIER APPLICATION NUMBER: PCT/IB97/00879
; EARLIER FILING DATE: 1997-05-22
; EARLIER APPLICATION NUMBER: US 60/069,812
; EARLIER FILING DATE: 1997-12-17
; EARLIER APPLICATION NUMBER: US 09/194,284
; EARLIER FILING DATE: 1998-11-23
; NUMBER OF SEQ ID NOS: 41
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 8
; LENGTH: 15
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)..(14)
; OTHER INFORMATION: Nucleotide 14 is n wherein n = u and u = uridine.
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)..(15)
; OTHER INFORMATION: Nucleotides 1-15 contain c, t, a & g wherein
; OTHER INFORMATION: c=cytidine; t=thymidine; a=adenosine; g=guanosine.
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)..(15)

; OTHER INFORMATION: m is a methyl group at the 5-position of
 ; OTHER INFORMATION: nucleotides 1, 5 and 10 of the cytosine portion of cytidine.
 ; FEATURE:
 ; OTHER INFORMATION: Description of Artificial Sequence:synthetic
 ; OTHER INFORMATION: construct
 US-09-206-866-8

Query Match 68.0%; Score 6.8; DB 3; Length 15;
 Best Local Similarity 66.7%; Pred. No. 4e+04;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
 :|||:|
 Db 9 AACGCTCG 1

RESULT 21
 US-09-206-866-9/c
 ; Sequence 9, Application US/09206866A
 ; Patent No. 6150108
 ; GENERAL INFORMATION:
 ; APPLICANT: SZYF, Moshe
 ; APPLICANT: BIGEY, Pascal
 ; TITLE OF INVENTION: SPECIFIC INHIBITORS OF DNA METHYLTRANSFERASE
 ; FILE REFERENCE: 106101.200

; CURRENT APPLICATION NUMBER: US/09/206,866A
 ; CURRENT FILING DATE: 1998-12-08
 ; EARLIER APPLICATION NUMBER: US 08/653,954
 ; EARLIER FILING DATE: 1996-05-22
 ; EARLIER APPLICATION NUMBER: PCT/IB97/00879
 ; EARLIER FILING DATE: 1997-05-22
 ; EARLIER APPLICATION NUMBER: US 60/069,812
 ; EARLIER FILING DATE: 1997-12-17
 ; EARLIER APPLICATION NUMBER: US 09/194,284
 ; EARLIER FILING DATE: 1998-11-23
 ; NUMBER OF SEQ ID NOS: 41
 ; SOFTWARE: PatentIn Ver. 2.0
 ; SEQ ID NO 9
 ; LENGTH: 15
 ; TYPE: DNA
 ; ORGANISM: Artificial Sequence
 ; FEATURE:
 ; NAME/KEY: misc feature
 ; LOCATION: (1)..(14)
 ; OTHER INFORMATION: Nucleotide 14 is n wherein n= u and u = uridine.

; FEATURE:
 ; NAME/KEY: misc feature
 ; LOCATION: (1)..(15)
 ; OTHER INFORMATION: Nucleotides 1-15 contain c, t, a & g wherein
 ; OTHER INFORMATION: c=cytidine; t=thymidine; a=adenosine; g=guanosine;
 ; OTHER INFORMATION: m is a methyl group at the 5-position of
 ; OTHER INFORMATION: nucleotides 1 & 5 of the cytosine portion of
 ; OTHER INFORMATION: cytidine.
 ; FEATURE:
 ; OTHER INFORMATION: Description of Artificial Sequence:synthetic
 ; OTHER INFORMATION: construct
 US-09-206-866-9

Query Match 68.0%; Score 6.8; DB 3; Length 15;
 Best Local Similarity 66.7%; Pred. No. 4e+04;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
 :|||:|
 Db 9 AACGCTCG 1

RESULT 22
 US-09-206-866-10/c
 ; Sequence 10, Application US/09206866A
 ; Patent No. 6150108
 ; GENERAL INFORMATION:
 ; APPLICANT: SZYF, Moshe

; APPLICANT: BIGEY, Pascal
 ; TITLE OF INVENTION: SPECIFIC INHIBITORS OF DNA METHYLTRANSFERASE
 ; FILE REFERENCE: 106101.200
 ; CURRENT APPLICATION NUMBER: US/09/206,866A
 ; CURRENT FILING DATE: 1998-12-08
 ; EARLIER APPLICATION NUMBER: US 08/653,954
 ; EARLIER FILING DATE: 1996-05-22
 ; EARLIER APPLICATION NUMBER: PCT/IB97/00879
 ; EARLIER FILING DATE: 1997-05-22
 ; EARLIER APPLICATION NUMBER: US 60/069,812
 ; EARLIER FILING DATE: 1997-12-17
 ; EARLIER APPLICATION NUMBER: US 09/194,284
 ; EARLIER FILING DATE: 1998-11-23
 ; NUMBER OF SEQ ID NOS: 41
 ; SOFTWARE: PatentIn Ver. 2.0
 ; SEQ ID NO 10
 ; LENGTH: 15
 ; TYPE: DNA
 ; ORGANISM: Artificial Sequence
 ; FEATURE:
 ; NAME/KEY: misc feature
 ; LOCATION: (1)..(14)
 ; OTHER INFORMATION: Nucleotide 14 is n wherein n = u and u = uridine.

; FEATURE:
 ; NAME/KEY: misc feature
 ; LOCATION: (1)..(15)
 ; OTHER INFORMATION: Nucleotides 1-15 contain c, t, a & g wherein
 ; OTHER INFORMATION: c=cytidine; t=thymidine; a=adenosine; g=guanosine;
 ; OTHER INFORMATION: m is a methyl group at the 5-position of
 ; OTHER INFORMATION: nucleotide 1 of the cytosine portion of cytidine.
 ; FEATURE:
 ; OTHER INFORMATION: Description of Artificial Sequence:synthetic
 ; OTHER INFORMATION: construct
 US-09-206-866-10

Query Match 68.0%; Score 6.8; DB 3; Length 15;
 Best Local Similarity 66.7%; Pred. No. 4e+04;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
 :|||:|
 Db 9 AACGCTCG 1

RESULT 23
 US-09-332-319-7
 ; Sequence 7, Application US/09332319

; Patent No. 6171821
 ; GENERAL INFORMATION:
 ; APPLICANT: Korneluk, Robert G.
 ; APPLICANT: Holcik, Martin
 ; APPLICANT: Liston, Peter
 ; TITLE OF INVENTION: XIAP IRES AND USES THEREOF
 ; FILE REFERENCE: 07891/021002
 ; CURRENT APPLICATION NUMBER: US/09/332,319
 ; CURRENT FILING DATE: 1999-06-14
 ; EARLIER APPLICATION NUMBER: 09/121,979
 ; EARLIER FILING DATE: 1998-07-24

; NUMBER OF SEQ ID NOS: 30
 ; SOFTWARE: FastSeq for Windows Version 3.0
 ; SEQ ID NO 7
 ; LENGTH: 15
 ; TYPE: DNA

; ORGANISM: Homo sapiens
 US-09-332-319-7

Query Match 68.0%; Score 6.8; DB 3; Length 15;
 Best Local Similarity 66.7%; Pred. No. 4e+04;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
 :|||:|
 Db 7 TAGCGCTCG 15

```
RESULT 24
US-09-332-319-8/c
; Sequence 8, Application US/09332319
; Patent No. 6171821
; GENERAL INFORMATION:
; APPLICANT: Korneluk, Robert G.
; APPLICANT: Holcik, Martin
; APPLICANT: Liston, Peter
; TITLE OF INVENTION: XIAP IRES AND USES THEREOF
; FILE REFERENCE: 07891/021002
; CURRENT APPLICATION NUMBER: US/09/332,319
; CURRENT FILING DATE: 1999-06-14
; EARLIER APPLICATION NUMBER: 09/121,979
; EARLIER FILING DATE: 1998-07-24
; NUMBER OF SEQ ID NOS: 30
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 8
; LENGTH: 15
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-332-319-8
Query Match      68.0%; Score 6.8; DB 3; Length 15;
Best Local Similarity 66.7%; Pred. No. 4e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
   :|:|:|
Db 9 TAGCGGTCG 1

RESULT 25
US-09-332-319-9/c
; Sequence 9, Application US/09332319
; Patent No. 6171821
; GENERAL INFORMATION:
; APPLICANT: Korneluk, Robert G.
; APPLICANT: Holcik, Martin
; APPLICANT: Liston, Peter
; TITLE OF INVENTION: XIAP IRES AND USES THEREOF
; FILE REFERENCE: 07891/021002
; CURRENT APPLICATION NUMBER: US/09/332,319
; CURRENT FILING DATE: 1999-06-14
; EARLIER APPLICATION NUMBER: 09/121,979
; EARLIER FILING DATE: 1998-07-24
; NUMBER OF SEQ ID NOS: 30
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 9
; LENGTH: 15
; TYPE: RNA
; ORGANISM: Homo sapiens
US-09-332-319-9
Query Match      68.0%; Score 6.8; DB 3; Length 15;
Best Local Similarity 66.7%; Pred. No. 4e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
   :|:|:|
Db 9 TAGCGGTCG 1

RESULT 26
US-09-206-866A-5/c
; Sequence 5, Application US/09206866A
; Patent No. 6268137
; GENERAL INFORMATION:
; APPLICANT: SZYF, Moshe
; APPLICANT: BIGEY, Pascal
; TITLE OF INVENTION: SPECIFIC INHIBITORS OF DNA METHYLTRANSFERASE
; FILE REFERENCE: 106101.200
US-09-206-866A-5/c
Query Match      68.0%; Score 6.8; DB 3; Length 15;
Best Local Similarity 66.7%; Pred. No. 4e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
   :|:|:|
Db 9 TAGCGGTCG 1

RESULT 27
US-09-206-866A-6/c
; Sequence 6, Application US/09206866A
; Patent No. 6268137
; GENERAL INFORMATION:
; APPLICANT: SZYF, Moshe
; APPLICANT: BIGEY, Pascal
; TITLE OF INVENTION: SPECIFIC INHIBITORS OF DNA METHYLTRANSFERASE
; FILE REFERENCE: 106101.200
US-09-206-866A-6/c
Query Match      68.0%; Score 6.8; DB 3; Length 15;
Best Local Similarity 66.7%; Pred. No. 4e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
   :|:|:|
Db 9 AACGGTCG 1

US-09-206-866A-5
; CURRENT APPLICATION NUMBER: US/09/206,866A
; CURRENT FILING DATE: 1998-12-08
; PRIOR APPLICATION NUMBER: US 08/653,954
; PRIOR FILING DATE: 1996-05-22
; PRIOR APPLICATION NUMBER: PCT/IB97/00879
; PRIOR FILING DATE: 1997-05-22
; PRIOR APPLICATION NUMBER: US 60/069,812
; PRIOR FILING DATE: 1997-12-17
; PRIOR APPLICATION NUMBER: US 09/194,284
; PRIOR FILING DATE: 1998-11-23
; NUMBER OF SEQ ID NOS: 41
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 5
; LENGTH: 15
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; NAME/KEY: misc.feature
; LOCATION: (1)..(14)
; OTHER INFORMATION: Nucleotide 14 is n wherein n = i and i = inosine.
; NAME/KEY: misc.feature
; LOCATION: (1)..(15)
; OTHER INFORMATION: Nucleotides 1-15 contain c, t, a & g wherein
; NAME/KEY: misc.feature
; LOCATION: (1)..(15)
; OTHER INFORMATION: c=cytidine; t=thymidine; a=adenosine; g=guanosine.
; OTHER INFORMATION: m is a methyl group at the 5-position of
; nucleotides 1, 5 and 10 of the cytosine portion of cytidine.
; OTHER INFORMATION: Description of Artificial Sequence:synthetic
; OTHER INFORMATION: construct
US-09-206-866A-5
```

; OTHER INFORMATION: c-cytidine; t-thymidine; a=adenosine; g=guanosine;
; OTHER INFORMATION: m is a methyl group at the 5-position of
; OTHER INFORMATION: nucleotides 1 & 5 of the cytosine portion of
; OTHER INFORMATION: cytidine.
; OTHER INFORMATION: Description of Artificial Sequence: synthetic
; OTHER INFORMATION: construct
US-09-206-866A-6

Query Match 69.0%; Score 6.8; DB 3; Length 15;
Best Local Similarity 66.7%; Pred. No. 4e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: |||: |||
Db 9 AAACGTTTCG 1

RESULT 28
US-09-206-866A-7/c
; Sequence 7, Application US/09206866A
; Patent No. 6268137
; GENERAL INFORMATION:
; APPLICANT: BIGEY, Moshe
; TITLE OF INVENTION: SPECIFIC INHIBITORS OF DNA METHYLTRANSFERASE
; FILE REFERENCE: 106101.200
; CURRENT APPLICATION NUMBER: US/09/206,866A
; PRIOR FILING DATE: 1998-12-08
; PRIOR APPLICATION NUMBER: US 08/653,954
; PRIOR FILING DATE: 1996-05-22
; PRIOR APPLICATION NUMBER: PCT/IB97/00879
; PRIOR FILING DATE: 1997-05-22
; PRIOR APPLICATION NUMBER: US 60/069,812
; PRIOR FILING DATE: 1997-12-17
; PRIOR APPLICATION NUMBER: US 09/194,284
; PRIOR FILING DATE: 1998-11-23
; NUMBER OF SEQ ID NOS: 41
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 7
; LENGTH: 15
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)..(14)
; OTHER INFORMATION: Nucleotide 14 is n wherein n = i and i = inosine.
; NAME/KEY: misc_feature
; LOCATION: (1)..(15)
; OTHER INFORMATION: Nucleotides 1-15 contain c, t, a & g wherein
; OTHER INFORMATION: c-cytidine; t-thymidine; a=adenosine; g=guanosine;
; OTHER INFORMATION: m is a methyl group at the 5-position of
; OTHER INFORMATION: nucleotide 1 of the cytosine portion of cytidine.
; OTHER INFORMATION: Description of Artificial Sequence: synthetic
; OTHER INFORMATION: construct
US-09-206-866A-7

Query Match 68.0%; Score 6.8; DB 3; Length 15;
Best Local Similarity 66.7%; Pred. No. 4e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: |||: |||
Db 9 AAACGTTTCG 1

RESULT 29
US-09-206-866A-8/c
; Sequence 8, Application US/09206866A
; Patent No. 6268137
; GENERAL INFORMATION:
; APPLICANT: BIGEY, Moshe
; TITLE OF INVENTION: SPECIFIC INHIBITORS OF DNA METHYLTRANSFERASE

; FILE REFERENCE: 106101.200
; CURRENT APPLICATION NUMBER: US/09/206,866A
; CURRENT FILING DATE: 1998-12-08
; PRIOR APPLICATION NUMBER: US 08/653,954
; PRIOR FILING DATE: 1996-05-22
; PRIOR APPLICATION NUMBER: PCT/IB97/00879
; PRIOR FILING DATE: 1997-05-22
; PRIOR APPLICATION NUMBER: US 60/069,812
; PRIOR FILING DATE: 1997-12-17
; PRIOR APPLICATION NUMBER: US 09/194,284
; PRIOR FILING DATE: 1998-11-23
; NUMBER OF SEQ ID NOS: 41
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 8
; LENGTH: 15
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)..(14)
; OTHER INFORMATION: Nucleotide 14 is n wherein n = u and u = uridine.
; NAME/KEY: misc_feature
; LOCATION: (1)..(15)
; OTHER INFORMATION: Nucleotides 1-15 contain c, t, a & g wherein
; OTHER INFORMATION: c-cytidine; t-thymidine; a=adenosine; g=guanosine.
; NAME/KEY: misc_feature
; LOCATION: (1)..(15)
; OTHER INFORMATION: m is a methyl group at the 5-position of
; OTHER INFORMATION: nucleotides 1, 5 and 10 of the cytosine portion of cytidine.
; OTHER INFORMATION: Description of Artificial Sequence: synthetic
; OTHER INFORMATION: construct
US-09-206-866A-8

Query Match 68.0%; Score 6.8; DB 3; Length 15;
Best Local Similarity 66.7%; Pred. No. 4e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: |||: |||
Db 9 AAACGTTTCG 1

RESULT 30
US-09-206-866A-9/c
; Sequence 9, Application US/09206866A
; Patent No. 6268137
; GENERAL INFORMATION:
; APPLICANT: BIGEY, Moshe
; TITLE OF INVENTION: SPECIFIC INHIBITORS OF DNA METHYLTRANSFERASE
; FILE REFERENCE: 106101.200
; CURRENT APPLICATION NUMBER: US/09/206,866A
; CURRENT FILING DATE: 1998-12-08
; PRIOR APPLICATION NUMBER: US 08/653,954
; PRIOR FILING DATE: 1996-05-22
; PRIOR APPLICATION NUMBER: PCT/IB97/00879
; PRIOR FILING DATE: 1997-05-22
; PRIOR APPLICATION NUMBER: US 60/069,812
; PRIOR FILING DATE: 1997-12-17
; PRIOR APPLICATION NUMBER: US 09/194,284
; PRIOR FILING DATE: 1998-11-23
; NUMBER OF SEQ ID NOS: 41
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 9
; LENGTH: 15
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)..(14)
; OTHER INFORMATION: Nucleotide 14 is n wherein n = u and u = uridine.
; NAME/KEY: misc_feature
; LOCATION: (1)..(15)

; OTHER INFORMATION: Nucleotides 1-15 contain c, t, a & g wherein
; OTHER INFORMATION: c-cytidine; t-thymidine; a-adenosine; g-guanosine;
; OTHER INFORMATION: m is a methyl group at the 5-position of
; OTHER INFORMATION: nucleotides 1 & 5 of the cytosine portion of
; OTHER INFORMATION: cytidine.
; OTHER INFORMATION: Description of Artificial Sequence:synthetic
; OTHER INFORMATION: construct
US-09-206-866A-9

Query Match 68.0%; Score 6.8; DB 3; Length 15;
Best Local Similarity 66.7%; Pred. No. 4e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGKTCG 10
: |||||
Db 9 AAACGTTCG 1

RESULT 31
US-09-206-866A-10/c
; Sequence 10, Application US/09206866A
; Patent No. 6268137
; GENERAL INFORMATION:
; APPLICANT: SZYF, Moshe
; APPLICANT: BIGEY, Pascal
; TITLE OF INVENTION: SPECIFIC INHIBITORS OF DNA METHYLTRANSFERASE
; FILE REFERENCE: 106101.200
; CURRENT APPLICATION NUMBER: US/09/206,866A
; CURRENT FILING DATE: 1998-12-08
; PRIOR APPLICATION NUMBER: US 08/653,954
; PRIOR FILING DATE: 1996-05-22
; PRIOR APPLICATION NUMBER: PCT/IB97/00879
; PRIOR FILING DATE: 1997-05-22
; PRIOR APPLICATION NUMBER: US 60/069,812
; PRIOR FILING DATE: 1997-12-17
; PRIOR APPLICATION NUMBER: US 09/194,284
; PRIOR FILING DATE: 1998-11-23
; NUMBER OF SEQ ID NOS: 41
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 10
; LENGTH: 15
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)..(14)
; OTHER INFORMATION: Nucleotide 14 is n wherein n = u and u = uridine.
; NAME/KEY: misc feature
; LOCATION: (1)..(15)
; OTHER INFORMATION: Nucleotides 1-15 contain c, t, a & g wherein
; OTHER INFORMATION: c-cytidine; t-thymidine; a-adenosine; g-guanosine;
; OTHER INFORMATION: m is a methyl group at the 5-position of
; OTHER INFORMATION: nucleotide 1 of the cytosine portion of cytidine.
; OTHER INFORMATION: Description of Artificial Sequence:synthetic
; OTHER INFORMATION: construct
US-09-206-866A-10

Query Match 68.0%; Score 6.8; DB 3; Length 15;
Best Local Similarity 66.7%; Pred. No. 4e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGKTCG 10
: |||||
Db 9 AAACGTTCG 1

RESULT 32
US-09-257-580-9
; Sequence 9, Application US/09257580
; Patent No. 6307036
; GENERAL INFORMATION:
; APPLICANT: Yorkshire Cancer Research
; TITLE OF INVENTION: Tumour Suppressor Gene

; FILE REFERENCE: Canine p53
; CURRENT APPLICATION NUMBER: US/09/257,580
; CURRENT FILING DATE: 1999-02-25
; PRIOR APPLICATION NUMBER: 9804178.3
; PRIOR FILING DATE: 1998-02-28
; NUMBER OF SEQ ID NOS: 11
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 9
; LENGTH: 15
; TYPE: DNA
; ORGANISM: canis
US-09-257-580-9

Query Match 68.0%; Score 6.8; DB 3; Length 15;
Best Local Similarity 66.7%; Pred. No. 4e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGKTCG 10
: |||||
Db 5 AACCGGTCG 13

RESULT 33
US-09-431-419A-12
; Sequence 12, Application US/09431419A
; Patent No. 6458567
; GENERAL INFORMATION:
; APPLICANT: Barber, Jack R.
; APPLICANT: Welch, Peter J.
; APPLICANT: Tritz, Richard
; APPLICANT: Yei, Soonpin
; APPLICANT: Yu, Mang
; TITLE OF INVENTION: HEPATITIS C VIRUS RIBOZYMES
; FILE REFERENCE: 480124.403C3
; CURRENT APPLICATION NUMBER: US/09/431,419A
; CURRENT FILING DATE: 1999-11-01
; NUMBER OF SEQ ID NOS: 73
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 12
; LENGTH: 15
; TYPE: DNA
; ORGANISM: Hepatitis C Virus
US-09-431-419A-12

Query Match 68.0%; Score 6.8; DB 3; Length 15;
Best Local Similarity 55.6%; Pred. No. 4e+04;
Matches 5; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGKTCG 10
: |||||
Db 1 GAGCGGUCG 9

RESULT 34
US-09-261-115-6/c
; Sequence 6, Application US/09261115
; Patent No. 6458584
; GENERAL INFORMATION:
; APPLICANT: MIRZABEKOV, ANDREI
; APPLICANT: GUSCHIN, DMITRY Y.
; APPLICANT: SHIK, VALENTINE
; APPLICANT: DROBYSHEV, ALEKSEI
; APPLICANT: FOTIN, ALEXANDER
; APPLICANT: YERSHOV, GENNADIY
; APPLICANT: LYSOV, YU
; TITLE OF INVENTION: CUSTOMIZED OLIGONUCLEOTIDE MICROCHIPS THAT CONVERT
; TITLE OF INVENTION: MULTIPLE GENETIC INFORMATION TO SIMPLE PATTERNS, ARE
; FILE REFERENCE: 21416/90184
; CURRENT APPLICATION NUMBER: US/09/261,115
; CURRENT FILING DATE: 1999-03-03
; NUMBER OF SEQ ID NOS: 78
; SOFTWARE: PatentIn Ver. 2.1

; SEQ ID NO 6
; LENGTH: 15
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: Customized
; OTHER INFORMATION: oligonucleotide
US-09-261-115-6

Query Match 68.0%; Score 6.8; DB 3; Length 15;
Best Local Similarity 66.7%; Pred. No. 4e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: |||:
Db 11 GACCGGTCG 3

RESULT 35
US-09-529-217-1/c
; Patent No. 6808879
; GENERAL INFORMATION:
; APPLICANT: SUEZ LYONNAISE DES EAUX
; TITLE OF INVENTION: MEANS FOR QUALITATIVE AND QUANTITATIVE ANALYSIS OF
; FILE REFERENCE: CP/FP/VB 59172
; CURRENT APPLICATION NUMBER: US/09/529,217
; CURRENT FILING DATE: 2000-06-05
; EARLIER FILING DATE: 1997-10-08
; NUMBER OF SEQ ID NOS: 4
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 1
; LENGTH: 15
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence : primer_bind
; Patent No. 6808879
US-09-529-217-1

Query Match 68.0%; Score 6.8; DB 4; Length 15;
Best Local Similarity 66.7%; Pred. No. 4e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: |||:
Db 11 GACCGGTCG 3

RESULT 36
5182195-49
; Patent No. 5182195
; APPLICANT: NAKAHAMA, KAZUO; KAISHO, YOSHIHIKO; YOSHIMURA, KOJI
; TITLE OF INVENTION: METHOD FOR INCREASING USING PROTEASE
; DEFICIENT YEASTS
; NUMBER OF SEQUENCES: 71
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/269,140
; FILING DATE: 09-NOV-1988
; SEQ ID NO: 49;
; LENGTH: 15
5182195-49

Query Match 68.0%; Score 6.8; DB 6; Length 15;
Best Local Similarity 66.7%; Pred. No. 4e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: |||:
Db 2 GACCGGTCG 10

RESULT 37
5182195-49
; Patent No. 5182195
; APPLICANT: NAKAHAMA, KAZUO; KAISHO, YOSHIHIKO; YOSHIMURA, KOJI
; TITLE OF INVENTION: METHOD FOR INCREASING USING PROTEASE
; DEFICIENT YEASTS
; NUMBER OF SEQUENCES: 71
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/269,140
; FILING DATE: 09-NOV-1988
; SEQ ID NO: 49;
; LENGTH: 15
5182195-49

Query Match 68.0%; Score 6.8; DB 6; Length 15;
Best Local Similarity 66.7%; Pred. No. 4e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: |||:
Db 2 GACCGGTCG 10

RESULT 38
US-08-954-210-11
; Sequence 11, Application US/08954210
; Patent No. 6043077
; GENERAL INFORMATION:
; APPLICANT: Barber, Jack R.
; APPLICANT: Welch, Peter J.
; APPLICANT: Tritz, Richard
; APPLICANT: Yei, Soomin
; APPLICANT: Yu, Mang
; TITLE OF INVENTION: HEPATITIS C VIRUS RIBOZYMES
; NUMBER OF SEQUENCES: 73
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: SEED and BERRY LLP
; STREET: 6300 Columbia Center, 701 Fifth Avenue
; CITY: Seattle
; STATE: Washington
; COUNTRY: USA
; ZIP: 98104-7092
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/954,210
; FILING DATE: 20-OCT-1997
; CLASSIFICATION: 514
; ATTORNEY/AGENT INFORMATION:
; NAME: McMahers, David D.
; REGISTRATION NUMBER: 33,963
; REFERENCE/DOCKET NUMBER: 480124.403C1
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (206) 622-4900
; TELEFAX: (206) 682-6031
; INFORMATION FOR SEQ ID NO: 11:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 16 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
US-08-954-210-11

Query Match 68.0%; Score 6.8; DB 3; Length 16;
Best Local Similarity 55.6%; Pred. No. 4e+04;
Matches 5; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10

```
Db          :|||::||
1 GAGCGGUC 9

RESULT 39
US-09-206-866-37/c
; Sequence 37, Application US/09206866A
; Patent No. 6150108
; GENERAL INFORMATION:
; APPLICANT: SZYP, Moshe
; APPLICANT: BIGEY, Pascal
; TITLE OF INVENTION: SPECIFIC INHIBITORS OF DNA METHYLTRANSFERASE
; FILE REFERENCE: 106101.200
; CURRENT APPLICATION NUMBER: US/09/206,866A
; CURRENT FILING DATE: 1998-12-08
; EARLIER APPLICATION NUMBER: US 08/653,954
; EARLIER FILING DATE: 1996-05-22
; EARLIER APPLICATION NUMBER: PCT/IB97/00879
; EARLIER FILING DATE: 1997-05-22
; EARLIER APPLICATION NUMBER: US 60/069,812
; EARLIER FILING DATE: 1997-12-17
; EARLIER APPLICATION NUMBER: US 09/194,284
; EARLIER FILING DATE: 1998-11-23
; NUMBER OF SEQ ID NOS: 41
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 37
; LENGTH: 16
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)..(16)
; OTHER INFORMATION: Nucleotides 1-16 contain c, t, a & g wherein
; OTHER INFORMATION: c-cytidine; t-thymidine; a-adenosine; g-guanosine;
; OTHER INFORMATION: m is a methyl group at the 5-position of
; OTHER INFORMATION: nucleotides 1 & 5 of the cytosine position of
; OTHER INFORMATION: cytidine.
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)..(15)
; OTHER INFORMATION: Nucleotide 15 is n wherein n = i and i = inosine.
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:synthetic
; OTHER INFORMATION: construct
US-09-206-866-38
Query Match          68.0%; Score 6.8; DB 3; Length 16;
Best Local Similarity 66.7%; Pred. No. 4e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
Db          :|||::||
9 AAACGTCG 1

RESULT 41
US-09-206-866-39/c
; Sequence 39, Application US/09206866A
; Patent No. 6150108
; GENERAL INFORMATION:
; APPLICANT: SZYP, Moshe
; APPLICANT: BIGEY, Pascal
; TITLE OF INVENTION: SPECIFIC INHIBITORS OF DNA METHYLTRANSFERASE
; FILE REFERENCE: 106101.200
; CURRENT APPLICATION NUMBER: US/09/206,866A
; CURRENT FILING DATE: 1998-12-08
; EARLIER APPLICATION NUMBER: US 08/653,954
; EARLIER FILING DATE: 1996-05-22
; EARLIER APPLICATION NUMBER: PCT/IB97/00879
; EARLIER FILING DATE: 1997-05-22
; EARLIER APPLICATION NUMBER: US 60/069,812
; EARLIER FILING DATE: 1997-12-17
; EARLIER APPLICATION NUMBER: US 09/194,284
; EARLIER FILING DATE: 1998-11-23
; NUMBER OF SEQ ID NOS: 41
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 39
; LENGTH: 16
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)..(16)
; OTHER INFORMATION: Nucleotides 1-16 contain c, t, a & g wherein
; OTHER INFORMATION: c-cytidine; t-thymidine; a-adenosine; g-guanosine;
; OTHER INFORMATION: m is a methyl group at the 5-position of
; OTHER INFORMATION: nucleotides 1 & 5 of the cytosine position of
; OTHER INFORMATION: cytidine.
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)..(15)
; OTHER INFORMATION: Nucleotide 15 is n wherein n = u and u = uridine.
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:synthetic
; OTHER INFORMATION: construct
US-09-206-866-39
Query Match          68.0%; Score 6.8; DB 3; Length 16;
Best Local Similarity 66.7%; Pred. No. 4e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
Db          :|||::||
9 AAACGTCG 1

RESULT 40
US-09-206-866-38/c
; Sequence 38, Application US/09206866A
; Patent No. 6150108
; GENERAL INFORMATION:
; APPLICANT: SZYP, Moshe
; APPLICANT: BIGEY, Pascal
; TITLE OF INVENTION: SPECIFIC INHIBITORS OF DNA METHYLTRANSFERASE
; FILE REFERENCE: 106101.200
; CURRENT APPLICATION NUMBER: US/09/206,866A
; CURRENT FILING DATE: 1998-12-08
; EARLIER APPLICATION NUMBER: US 08/653,954
; EARLIER FILING DATE: 1996-05-22
; EARLIER APPLICATION NUMBER: PCT/IB97/00879
; EARLIER FILING DATE: 1997-05-22
; EARLIER APPLICATION NUMBER: US 60/069,812
; EARLIER FILING DATE: 1997-12-17
; EARLIER APPLICATION NUMBER: US 09/194,284
; EARLIER FILING DATE: 1998-11-23
; NUMBER OF SEQ ID NOS: 41
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 38
```

Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 2 DANCCKTCG 10
: |||: |||
Db 9 AACGTTTCG 1

RESULT 42

US-09-206-866-40/c
; Sequence 40, Application US/09206866A
; Patent No. 6150108
; GENERAL INFORMATION:
; APPLICANT: BIGEY, Pascal
; APPLICANT: SZYF, Moshe
; TITLE OF INVENTION: SPECIFIC INHIBITORS OF DNA METHYLTRANSFERASE
; FILE REFERENCE: 106101.200
; CURRENT APPLICATION NUMBER: US/09/206,866A
; CURRENT FILING DATE: 1998-12-08
; EARLIER APPLICATION NUMBER: US 08/653,954
; EARLIER FILING DATE: 1996-05-22
; EARLIER APPLICATION NUMBER: PCT/IB97/00879
; EARLIER FILING DATE: 1997-05-22
; EARLIER APPLICATION NUMBER: US 60/069,812
; EARLIER FILING DATE: 1997-12-17
; EARLIER APPLICATION NUMBER: US 09/194,284
; EARLIER FILING DATE: 1998-11-23
; NUMBER OF SEQ ID NOS: 41
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 40
; LENGTH: 16
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)..(16)
; OTHER INFORMATION: Nucleotides 1-16 contain c, t, a & g wherein
; OTHER INFORMATION: c=cytidine; t=thymidine; a=adenosine; g=guanosine;
; OTHER INFORMATION: m is a methyl group at the 5-position of
; OTHER INFORMATION: nucleotides 1 & 5 of the cytosine portion of
; OTHER INFORMATION: cytidine.
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)..(15)
; OTHER INFORMATION: Nucleotide 15 is n wherein n = b and b = cytosine, inosine,
; OTHER INFORMATION: uridine, 5-bromocytidine or 5-fluorouridine.
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:synthetic
; OTHER INFORMATION: construct
US-09-206-866-41

Query Match 68.0%; Score 6.8; DB 3; Length 16;
Best Local Similarity 66.7%; Pred. No. 4e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 2 DANCCKTCG 10
: |||: |||: |||
Db 9 AACGTTTCG 1

RESULT 44

US-09-206-866A-37/c
; Sequence 37, Application US/09206866A
; Patent No. 6268137
; GENERAL INFORMATION:
; APPLICANT: SZYF, Moshe
; APPLICANT: BIGEY, Pascal
; TITLE OF INVENTION: SPECIFIC INHIBITORS OF DNA METHYLTRANSFERASE
; FILE REFERENCE: 106101.200
; CURRENT APPLICATION NUMBER: US/09/206,866A
; CURRENT FILING DATE: 1998-12-08
; PRIOR APPLICATION NUMBER: US 08/653,954
; PRIOR FILING DATE: 1996-05-22
; PRIOR APPLICATION NUMBER: PCT/IB97/00879
; PRIOR FILING DATE: 1997-05-22
; PRIOR APPLICATION NUMBER: US 60/069,812
; PRIOR FILING DATE: 1997-12-17
; PRIOR APPLICATION NUMBER: US 09/194,284
; PRIOR FILING DATE: 1998-11-23
; NUMBER OF SEQ ID NOS: 41
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 37
; LENGTH: 16
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)..(16)
; OTHER INFORMATION: Nucleotides 1-16 contain c, t, a & g wherein
; OTHER INFORMATION: c=cytidine; t=thymidine; a=adenosine; g=guanosine;
; OTHER INFORMATION: m is a methyl group at the 5-position of
; OTHER INFORMATION: nucleotides 1 & 5 of the cytosine portion of
; OTHER INFORMATION: cytidine.
; OTHER INFORMATION: Description of Artificial Sequence:synthetic
; OTHER INFORMATION: construct

Query Match 68.0%; Score 6.8; DB 3; Length 16;
Best Local Similarity 66.7%; Pred. No. 4e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 2 DANCCKTCG 10
: |||: |||: |||
Db 9 AACGTTTCG 1

RESULT 43

US-09-206-866-41/c
; Sequence 41, Application US/09206866A
; Patent No. 6150108
; GENERAL INFORMATION:
; APPLICANT: BIGEY, Moshe
; APPLICANT: SZYF, Moshe
; TITLE OF INVENTION: SPECIFIC INHIBITORS OF DNA METHYLTRANSFERASE
; FILE REFERENCE: 106101.200
; CURRENT APPLICATION NUMBER: US/09/206,866A
; CURRENT FILING DATE: 1998-12-08
; EARLIER APPLICATION NUMBER: US 08/653,954
; EARLIER FILING DATE: 1996-05-22
; EARLIER APPLICATION NUMBER: PCT/IB97/00879

US-09-206-866A-37

Query Match 68.0%; Score 6.8; DB 3; Length 16;
Best Local Similarity 66.7%; Pred. No. 4e+04; 1; Indels 0; Gaps 0;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10

: |||:|

9 AAACGTTTCG 1

Db

RESULT 45

US-09-206-866A-38/c
; Sequence 38, Application US/09206866A
; Patent No. 6268137
; GENERAL INFORMATION:
; APPLICANT: SZYF, Moshe
; TITLE OF INVENTION: SPECIFIC INHIBITORS OF DNA METHYLTRANSFERASE
; FILE REFERENCE: 106101.200
; CURRENT APPLICATION NUMBER: US/09/206,866A
; CURRENT FILING DATE: 1998-12-08
; PRIOR APPLICATION NUMBER: US 08/653,954
; PRIOR FILING DATE: 1996-05-22
; PRIOR APPLICATION NUMBER: PCT/IB97/00879
; PRIOR FILING DATE: 1997-05-22
; PRIOR APPLICATION NUMBER: US 60/069,812
; PRIOR FILING DATE: 1997-12-17
; PRIOR APPLICATION NUMBER: US 09/194,284
; PRIOR FILING DATE: 1998-11-23
; NUMBER OF SEQ ID NOS: 41
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 38
; LENGTH: 16
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)..(16)
; OTHER INFORMATION: Nucleotides 1-16 contain c, t, a & g wherein
; OTHER INFORMATION: c=cytidine; t=thymidine; a=adenosine; g=guanosine;
; OTHER INFORMATION: m is a methyl group at the 5-position of
; OTHER INFORMATION: nucleotides 1 & 5 of the cytosine portion of
; OTHER INFORMATION: cytidine.
; NAME/KEY: misc feature
; LOCATION: (1)..(15)
; OTHER INFORMATION: Nucleotide 15 is n wherein n = i and i = inosine.
; OTHER INFORMATION: Description of Artificial Sequence:synthetic
; OTHER INFORMATION: construct
US-09-206-866A-38

Query Match 68.0%; Score 6.8; DB 3; Length 16;
Best Local Similarity 66.7%; Pred. No. 4e+04; 1; Indels 0; Gaps 0;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10

: |||:|

9 AAACGTTTCG 1

Db

RESULT 46

US-09-206-866A-39/c
; Sequence 39, Application US/09206866A
; Patent No. 6268137
; GENERAL INFORMATION:
; APPLICANT: SZYF, Moshe
; TITLE OF INVENTION: SPECIFIC INHIBITORS OF DNA METHYLTRANSFERASE
; FILE REFERENCE: 106101.200
; CURRENT APPLICATION NUMBER: US/09/206,866A
; CURRENT FILING DATE: 1998-12-08
; PRIOR APPLICATION NUMBER: US 08/653,954
; PRIOR FILING DATE: 1996-05-22

; PRIOR APPLICATION NUMBER: PCT/IB97/00879
; PRIOR FILING DATE: 1997-05-22
; PRIOR APPLICATION NUMBER: US 60/069,812
; PRIOR FILING DATE: 1997-12-17
; PRIOR APPLICATION NUMBER: US 09/194,284
; PRIOR FILING DATE: 1998-11-23
; NUMBER OF SEQ ID NOS: 41
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 39
; LENGTH: 16
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)..(16)
; OTHER INFORMATION: Nucleotides 1-16 contain c, t, a & g wherein
; OTHER INFORMATION: c=cytidine; t=thymidine; a=adenosine; g=guanosine;
; OTHER INFORMATION: m is a methyl group at the 5-position of
; OTHER INFORMATION: nucleotides 1 & 5 of the cytosine portion of
; OTHER INFORMATION: cytidine.
; NAME/KEY: misc feature
; LOCATION: (1)..(15)
; OTHER INFORMATION: Nucleotide 15 is n wherein n = u and u = uridine.
; OTHER INFORMATION: Description of Artificial Sequence:synthetic
; OTHER INFORMATION: construct
US-09-206-866A-39

Query Match 68.0%; Score 6.8; DB 3; Length 16;
Best Local Similarity 66.7%; Pred. No. 4e+04; 1; Indels 0; Gaps 0;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10

: |||:|

9 AAACGTTTCG 1

Db

RESULT 47

US-09-206-866A-40/c
; Sequence 40, Application US/09206866A
; Patent No. 6268137
; GENERAL INFORMATION:
; APPLICANT: SZYF, Moshe
; TITLE OF INVENTION: SPECIFIC INHIBITORS OF DNA METHYLTRANSFERASE
; FILE REFERENCE: 106101.200
; CURRENT APPLICATION NUMBER: US/09/206,866A
; CURRENT FILING DATE: 1998-12-08
; PRIOR APPLICATION NUMBER: US 08/653,954
; PRIOR FILING DATE: 1996-05-22
; PRIOR APPLICATION NUMBER: PCT/IB97/00879
; PRIOR FILING DATE: 1997-05-22
; PRIOR APPLICATION NUMBER: US 60/069,812
; PRIOR FILING DATE: 1997-12-17
; PRIOR APPLICATION NUMBER: US 09/194,284
; PRIOR FILING DATE: 1998-11-23
; NUMBER OF SEQ ID NOS: 41
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 40
; LENGTH: 16
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)..(16)
; OTHER INFORMATION: Nucleotides 1-16 contain c, t, a & g wherein
; OTHER INFORMATION: c=cytidine; t=thymidine; a=adenosine; g=guanosine;
; OTHER INFORMATION: m is a methyl group at the 5-position of
; OTHER INFORMATION: nucleotides 1 & 5 of the cytosine portion of
; OTHER INFORMATION: cytidine.
; NAME/KEY: misc feature
; LOCATION: (1)..(15)
; OTHER INFORMATION: Nucleotide 15 is n wherein n = f and f =
; OTHER INFORMATION: 5-fluorocytosine.

; OTHER INFORMATION: Description of Artificial Sequence:synthetic
; OTHER INFORMATION: construct
US-09-206-866A-40

Query Match 68.0%; Score 6.8; DB 3; Length 16;
Best Local Similarity 66.7%; Pred. No. 4e+04; 1; Indels 0; Gaps 0;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: |||:|
Db 9 AAACGTCG 1

RESULT 48
US-09-206-866A-41/c
; Sequence 41, Application US/09206866A
; Patent No. 6268137
; GENERAL INFORMATION:
; APPLICANT: SZYP, Moshe
; APPLICANT: BIGEY, Pascal
; TITLE OF INVENTION: SPECIFIC INHIBITORS OF DNA METHYLTRANSFERASE
; FILE REFERENCE: 106101.200
; CURRENT APPLICATION NUMBER: US/09/206,866A
; CURRENT FILING DATE: 1998-12-08
; PRIOR APPLICATION NUMBER: US 08/653,954
; PRIOR FILING DATE: 1996-05-22
; PRIOR APPLICATION NUMBER: PCT/IB97/00879
; PRIOR FILING DATE: 1997-05-22
; PRIOR APPLICATION NUMBER: US 60/069,812
; PRIOR FILING DATE: 1997-12-17
; PRIOR APPLICATION NUMBER: US 09/194,284
; PRIOR FILING DATE: 1998-11-23
; NUMBER OF SEQ ID NOS: 41
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 41
; LENGTH: 16
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)..(16)
; OTHER INFORMATION: Nucleotides 1-16 contain c, t, a & g wherein
; OTHER INFORMATION: c=cytidine; t=thymidine; a=adenosine; g=guanosine;
; OTHER INFORMATION: m is a methyl group at the 5-position of
; OTHER INFORMATION: nucleotides 1 & 5 of the cytosine portion of
; OTHER INFORMATION: cytidine.
; NAME/KEY: misc feature
; LOCATION: (1)..(15)
; OTHER INFORMATION: Nucleotide 15 is n wherein n = b and b = cytosine, inosine,
; OTHER INFORMATION: uridine, 5-bromocytidine or 5-fluorouridine.
; OTHER INFORMATION: Description of Artificial Sequence:synthetic
; OTHER INFORMATION: construct
US-09-206-866A-41

Query Match 68.0%; Score 6.8; DB 3; Length 16;
Best Local Similarity 66.7%; Pred. No. 4e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: |||:|
Db 9 AAACGTCG 1

RESULT 49
US-09-054-832-4
; Sequence 4, Application US/09054832
; Patent No. 6312894
; GENERAL INFORMATION:
; APPLICANT: Meyer, Rich
; TITLE OF INVENTION: IMPROVED HYBRIDIZATION AND
; TITLE OF INVENTION: MISMATCH DISCRIMINATION USING OLIGONUCLEOTIDES
; TITLE OF INVENTION: CONJUGATED TO MINOR GROOVE BINDERS
; NUMBER OF SEQUENCES: 40

; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MORRISON & FOERSTER
; STREET: 755 PAGE MILL ROAD
; CITY: PALO ALTO
; STATE: CA
; COUNTRY: USA
; ZIP: 94304-1018
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: Windows
; SOFTWARE: FastSEQ for Windows Version 2.0b
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/054,832
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/415,370
; FILING DATE: 03-APR-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Brennan, Sean M
; REGISTRATION NUMBER: 39,917
; REFERENCE/DOCKET NUMBER: 34469-20004.20
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 650-813-5600
; TELEFAX: 650-494-0792
; TELEX: 706141
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 16 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
US-09-054-832-4

Query Match 68.0%; Score 6.8; DB 3; Length 16;
Best Local Similarity 66.7%; Pred. No. 4e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: |||:|
Db 4 TAACGTCG 12

RESULT 50
US-09-431-419A-11
; Sequence 11, Application US/09431419A
; Patent No. 6458567
; GENERAL INFORMATION:
; APPLICANT: Barber, Jack R.
; APPLICANT: Welch, Peter J.
; APPLICANT: Tritz, Richard
; APPLICANT: Yei, Soonpin
; APPLICANT: Yu, Mang
; TITLE OF INVENTION: HEPATITIS C VIRUS RIBOZYMES
; FILE REFERENCE: 480124.403C3
; CURRENT APPLICATION NUMBER: US/09/431,419A
; CURRENT FILING DATE: 1999-11-01
; NUMBER OF SEQ ID NOS: 73
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 11
; LENGTH: 16
; TYPE: DNA
; ORGANISM: Hepatitis C Virus
US-09-431-419A-11

Query Match 68.0%; Score 6.8; DB 3; Length 16;
Best Local Similarity 55.6%; Pred. No. 4e+04;
Matches 5; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: |||:|
Db 1 GAGCGGUCG 9

```
RESULT 51
US-09-640-953-4
; Sequence 4, Application US/09640953
; Patent No. 6492346
; GENERAL INFORMATION:
; APPLICANT: Meyer, Rich
; TITLE OF INVENTION: IMPROVED HYBRIDIZATION AND
; MISMATCH DISCRIMINATION USING OLIGONUCLEOTIDES
; CONJUGATED TO MINOR GROOVE BINDERS
; NUMBER OF SEQUENCES: 40
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: MORRISON & FOERSTER
; STREET: 755 PAGE MILL ROAD
; CITY: PALO ALTO
; STATE: CA
; COUNTRY: USA
; ZIP: 94304-1018
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: Windows
; SOFTWARE: FASTSEQ for Windows Version 2.0b
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/640,953
; FILING DATE: 16-Aug-2000
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/09/054,832
; FILING DATE: 03-APR-1998
; APPLICATION NUMBER: 08/415,370
; FILING DATE: 03-APR-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Brennan, Sean M
; REGISTRATION NUMBER: 39,917
; REFERENCE/DOCKET NUMBER: 34469-20004.20
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 650-813-5600
; TELEFAX: 650-494-0792
; TELEX: 706141
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 16 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; SEQUENCE DESCRIPTION: SEQ ID NO: 4:
US-09-640-953-4
Query Match 68.0%; Score 6.8; DB 4; Length 16;
Best Local Similarity 66.7%; Pred. No. 4e+04;
Matches 6; Conservative 2; Mismatches 0; Gaps 0;

QY 2 DANCCKTCG 10
: |||:
Db 4 TATCGTTCG 12

RESULT 52
US-09-705-400-37
; Sequence 37, Application US/09705400
; Patent No. 6692954
; GENERAL INFORMATION:
; APPLICANT: Ghazal, Peter
; TITLE OF INVENTION: Generation of Human Cytomegalovirus Yeast Artificial Chromosome
; RECOMBINANTS
; FILE REFERENCE: 98,299
; CURRENT APPLICATION NUMBER: US/09/705,400
; CURRENT FILING DATE: 2000-11-03
; NUMBER OF SEQ ID NOS: 64
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 37
```

```
; LENGTH: 16
; TYPE: DNA
; ORGANISM: Human cytomegalovirus
US-09-705-400-37
Query Match 68.0%; Score 6.8; DB 4; Length 16;
Best Local Similarity 66.7%; Pred. No. 4e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: |||:
Db 1 TATCGTTCG 9

RESULT 53
US-08-758-306-1235
; Sequence 1235, Application US/08758306
; Patent No. 5807743
; GENERAL INFORMATION:
; APPLICANT: Stinchcomb, Dan T.
; APPLICANT: McSwiggen, James A.
; TITLE OF INVENTION: METHOD AND REAGENT FOR THE
; TREATMENT OF DISEASES
; TITLE OF INVENTION: ASSOCIATED WITH
; INTERLEUKIN-2 RECEPTOR
; TITLE OF INVENTION: GAMMA-CHAIN EXPRESSION
; NUMBER OF SEQUENCES: 1379
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Lyon & Lyon
; STREET: 633 West Fifth Street
; CITY: Los Angeles
; STATE: California
; COUNTRY: U.S.A.
; ZIP: 90071-2066
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: IBM P.C. DOS 5.0
; SOFTWARE: FastSeq Version 1.5
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/758,306
; FILING DATE: December 3, 1996
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER:
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: Warburg, Richard J.
; REGISTRATION NUMBER: 32,327
; REFERENCE/DOCKET NUMBER: 212/132
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (213) 489-1600
; TELEFAX: (213) 955-0440
; TELEX: 67-3510
; INFORMATION FOR SEQ ID NO: 1235:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 17 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
US-08-758-306-1235
Query Match 68.0%; Score 6.8; DB 1; Length 17;
Best Local Similarity 55.6%; Pred. No. 4e+04;
Matches 5; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: |||:
Db 2 GAACGGUCG 10
```

```

RESULT 55
US-08-999-733-9/c
; Sequence 9, Application US/08999733
; Patent No. 6054573
; GENERAL INFORMATION:
; APPLICANT: Frey, Teryl K.
; APPLICANT: Pugachev, Konstantin V.
; APPLICANT: Abernathy, Emily S.
; TITLE OF INVENTION: Highly Infectious Rubella Virus Clones
; TITLE OF INVENTION: and Methods of Production
; NUMBER OF SEQUENCES: 9
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Jones & Askew, LLP
; STREET: 191 Peachtree Street, 37th Floor
; CITY: Atlanta
; STATE: Georgia
; COUNTRY: USA
; ZIP: 30303
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible

```

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RESULT 56
US-09-206-866-20/c
; Sequence 20, Application US/09206866A
; Patent No. 6150108
; GENERAL INFORMATION:
; APPLICANT: SYFV, Moshe
; APPLICANT: BIGEV, Pascal
; TITLE OF INVENTION: SPECIFIC INHIBITORS OF DNA METHYLTRANSFERASE
; FILE REFERENCE: 106101.200
; CURRENT APPLICATION NUMBER: US/09/206,866A
; CURRENT FILING DATE: 1998-12-08
; EARLIER APPLICATION NUMBER: US 08/653,954
; EARLIER FILING DATE: 1996-05-22
; EARLIER APPLICATION NUMBER: PCT/IB97/00879
; EARLIER FILING DATE: 1997-05-22
; EARLIER APPLICATION NUMBER: US 60/069,812
; EARLIER FILING DATE: 1997-12-17
; EARLIER APPLICATION NUMBER: US 09/194,284
; EARLIER FILING DATE: 1998-11-23
; NUMBER OF SEQ ID NOS: 41
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 20
; LENGTH: 17
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)..(17)
; OTHER INFORMATION: Nucleotides 1-17 contain c, t, a & g wherein
; OTHER INFORMATION: c=cytidine; t=thymidine; a=adenosine; g=guan
; OTHER INFORMATION: m is a methyl group at the 5-position of

```

```

; OTHER INFORMATION: nucleotides 1 & 5 of the cytosine portion of
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:synthetic
; OTHER INFORMATION: construct
US-09-206-866-20

```

```

Query Match      68.0%; Score 6.8; DB 3; Length 17;
Best Local Similarity 66.7%; Pred. No. 4e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

```

```

QY 2 DANCCKTGC 10
   :||:|
Db 9 AAACGTTGC 1

```

```

RESULT 57

```

```

US-09-206-866-21/c
; Sequence 21, Application US/09206866A
; Patent No. 6150108

```

```

; GENERAL INFORMATION:
; APPLICANT: SZYF, Moshe
; TITLE OF INVENTION: SPECIFIC INHIBITORS OF DNA METHYLTRANSFERASE
; FILE REFERENCE: 106101.200
; CURRENT APPLICATION NUMBER: US/09/206,866A
; EARLIER FILING DATE: 1998-12-08
; EARLIER APPLICATION NUMBER: US 08/653,954
; EARLIER FILING DATE: 1996-05-22
; EARLIER APPLICATION NUMBER: PCT/IB97/00879
; EARLIER FILING DATE: 1997-05-22
; EARLIER APPLICATION NUMBER: US 60/069,812
; EARLIER FILING DATE: 1997-12-17
; EARLIER APPLICATION NUMBER: US 09/194,284
; EARLIER FILING DATE: 1998-11-23
; NUMBER OF SEQ ID NOS: 41
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 21
; LENGTH: 17
; TYPE: DNA
; ORGANISM: Artificial Sequence
; NAME/KEY: misc feature
; LOCATION: (1)..(17)
; OTHER INFORMATION: Nucleotides 1-17 contain c, t, a & g wherein
; OTHER INFORMATION: c-cytidine; t-thymidine; a-adenosine; g-guanosine;
; OTHER INFORMATION: m is a methyl group at the 5-position of
; OTHER INFORMATION: nucleotides 1 & 5 of the cytosine portion of
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)..(16)
; OTHER INFORMATION: Nucleotide 16 is n wherein n = i and i = inosine.
; OTHER INFORMATION: Description of Artificial Sequence:synthetic
; OTHER INFORMATION: construct
US-09-206-866-21

```

```

Query Match      68.0%; Score 6.8; DB 3; Length 17;
Best Local Similarity 66.7%; Pred. No. 4e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

```

```

QY 2 DANCCKTGC 10
   :||:|
Db 9 AAACGTTGC 1

```

```

; APPLICANT: BIGEY, Pascal
; TITLE OF INVENTION: SPECIFIC INHIBITORS OF DNA METHYLTRANSFERASE
; FILE REFERENCE: 106101.200
; CURRENT APPLICATION NUMBER: US/09/206,866A
; EARLIER FILING DATE: 1998-12-08
; EARLIER APPLICATION NUMBER: US 08/653,954
; EARLIER FILING DATE: 1996-05-22
; EARLIER APPLICATION NUMBER: PCT/IB97/00879
; EARLIER FILING DATE: 1997-05-22
; EARLIER APPLICATION NUMBER: US 60/069,812
; EARLIER FILING DATE: 1997-12-17
; EARLIER APPLICATION NUMBER: US 09/194,284
; EARLIER FILING DATE: 1998-11-23
; NUMBER OF SEQ ID NOS: 41
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 21
; LENGTH: 17
; TYPE: DNA
; ORGANISM: Artificial Sequence
; NAME/KEY: misc feature
; LOCATION: (1)..(17)
; OTHER INFORMATION: Nucleotides 1-17 contain c, t, a & g wherein
; OTHER INFORMATION: c-cytidine; t-thymidine; a-adenosine; g-guanosine;
; OTHER INFORMATION: m is a methyl group at the 5-position of
; OTHER INFORMATION: nucleotides 1 & 5 of the cytosine portion of
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)..(16)
; OTHER INFORMATION: Nucleotide 16 is n wherein n = i and i = inosine.
; OTHER INFORMATION: Description of Artificial Sequence:synthetic
; OTHER INFORMATION: construct
US-09-206-866-21

```

```

Query Match      68.0%; Score 6.8; DB 3; Length 17;
Best Local Similarity 66.7%; Pred. No. 4e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

```

```

QY 2 DANCCKTGC 10
   :||:|
Db 9 AAACGTTGC 1

```

```

RESULT 58

```

```

US-09-206-866-22/c
; Sequence 22, Application US/09206866A
; Patent No. 6150108

```

```

; GENERAL INFORMATION:
; APPLICANT: SZYF, Moshe
; TITLE OF INVENTION: SPECIFIC INHIBITORS OF DNA METHYLTRANSFERASE
; FILE REFERENCE: 106101.200
; CURRENT APPLICATION NUMBER: US/09/206,866A
; EARLIER FILING DATE: 1998-12-08
; EARLIER APPLICATION NUMBER: US 08/653,954
; EARLIER FILING DATE: 1996-05-22
; EARLIER APPLICATION NUMBER: PCT/IB97/00879
; EARLIER FILING DATE: 1997-05-22
; EARLIER APPLICATION NUMBER: US 60/069,812
; EARLIER FILING DATE: 1997-12-17
; EARLIER APPLICATION NUMBER: US 09/194,284
; EARLIER FILING DATE: 1998-11-23
; NUMBER OF SEQ ID NOS: 41
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 23
; LENGTH: 17
; TYPE: DNA
; ORGANISM: Artificial Sequence
; NAME/KEY: misc feature
; LOCATION: (1)..(17)

```

```

; APPLICANT: BIGEY, Pascal
; TITLE OF INVENTION: SPECIFIC INHIBITORS OF DNA METHYLTRANSFERASE
; FILE REFERENCE: 106101.200
; CURRENT APPLICATION NUMBER: US/09/206,866A
; EARLIER FILING DATE: 1998-12-08
; EARLIER APPLICATION NUMBER: US 08/653,954
; EARLIER FILING DATE: 1996-05-22
; EARLIER APPLICATION NUMBER: PCT/IB97/00879
; EARLIER FILING DATE: 1997-05-22
; EARLIER APPLICATION NUMBER: US 60/069,812
; EARLIER FILING DATE: 1997-12-17
; EARLIER APPLICATION NUMBER: US 09/194,284
; EARLIER FILING DATE: 1998-11-23
; NUMBER OF SEQ ID NOS: 41
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 22
; LENGTH: 17
; TYPE: DNA
; ORGANISM: Artificial Sequence
; NAME/KEY: misc feature
; LOCATION: (1)..(17)
; OTHER INFORMATION: Nucleotides 1-17 contain c, t, a & g wherein
; OTHER INFORMATION: c-cytidine; t-thymidine; a-adenosine; g-guanosine;
; OTHER INFORMATION: m is a methyl group at the 5-position of
; OTHER INFORMATION: nucleotides 1 & 5 of the cytosine portion of
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)..(16)
; OTHER INFORMATION: Nucleotide 16 is n wherein n = u and u = uridine.
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence:synthetic
; OTHER INFORMATION: construct
US-09-206-866-22

```

```

Query Match      68.0%; Score 6.8; DB 3; Length 17;
Best Local Similarity 66.7%; Pred. No. 4e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

```

```

QY 2 DANCCKTGC 10
   :||:|
Db 9 AAACGTTGC 1

```

```

RESULT 59

```

```

US-09-206-866-23/c
; Sequence 23, Application US/09206866A
; Patent No. 6150108

```

```

; GENERAL INFORMATION:
; APPLICANT: SZYF, Moshe
; TITLE OF INVENTION: SPECIFIC INHIBITORS OF DNA METHYLTRANSFERASE
; FILE REFERENCE: 106101.200
; CURRENT APPLICATION NUMBER: US/09/206,866A
; EARLIER FILING DATE: 1998-12-08
; EARLIER APPLICATION NUMBER: US 08/653,954
; EARLIER FILING DATE: 1996-05-22
; EARLIER APPLICATION NUMBER: PCT/IB97/00879
; EARLIER FILING DATE: 1997-05-22
; EARLIER APPLICATION NUMBER: US 60/069,812
; EARLIER FILING DATE: 1997-12-17
; EARLIER APPLICATION NUMBER: US 09/194,284
; EARLIER FILING DATE: 1998-11-23
; NUMBER OF SEQ ID NOS: 41
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 23
; LENGTH: 17
; TYPE: DNA
; ORGANISM: Artificial Sequence
; NAME/KEY: misc feature
; LOCATION: (1)..(17)

```

OTHER INFORMATION: Nucleotides 1-17 contain c, t, a & g wherein
OTHER INFORMATION: c=cytidine; t=thymidine; a=adenosine; g=guanosine;
OTHER INFORMATION: m is a methyl group at the 5-position of
OTHER INFORMATION: nucleotides 1 & 5 of the cytosine portion of
OTHER INFORMATION: cytidine.
FEATURE:
NAME/KEY: misc feature
LOCATION: (1)..(16)
OTHER INFORMATION: Nucleotides 12 & 16 are n wherein n = f and f =
OTHER INFORMATION: 5-fluorocytosine.
FEATURE:
OTHER INFORMATION: Description of Artificial Sequence:synthetic
OTHER INFORMATION: construct
US-09-206-866-23

Query Match 68.0%; Score 6.8; DB 3; Length 17;
Best Local Similarity 66.7%; Pred. No. 4e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 2 DANCCKTCG 10
:| ||:|
Db 9 AACGTTTCG 1

RESULT 60

US-09-206-866-24/c
Sequence 24, Application US/09206866A
Patent No. 6150108
GENERAL INFORMATION:
APPLICANT: SZVF, Moshe
APPLICANT: BIGEY, Pascal
TITLE OF INVENTION: SPECIFIC INHIBITORS OF DNA METHYLTRANSFERASE
FILE REFERENCE: 106101.200
CURRENT APPLICATION NUMBER: US/09/206,866A
CURRENT FILING DATE: 1998-12-08
EARLIER APPLICATION NUMBER: US 08/653,954
EARLIER FILING DATE: 1996-05-22
EARLIER APPLICATION NUMBER: PCT/IB97/00879
EARLIER FILING DATE: 1997-05-22
EARLIER APPLICATION NUMBER: US 60/069,812
EARLIER FILING DATE: 1997-12-17
EARLIER APPLICATION NUMBER: US 09/194,284
EARLIER FILING DATE: 1998-11-23
NUMBER OF SEQ ID NOS: 41
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 24
LENGTH: 17
TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
NAME/KEY: misc feature
LOCATION: (1)..(17)
OTHER INFORMATION: Nucleotides 1-17 contain c, t, a & g wherein
OTHER INFORMATION: c=cytidine; t=thymidine; a=adenosine; g=guanosine;
OTHER INFORMATION: m is a methyl group at the 5-position of
OTHER INFORMATION: nucleotides 1 & 5 of the cytosine portion of
OTHER INFORMATION: cytidine.
FEATURE:
NAME/KEY: misc feature
LOCATION: (1)..(16)
OTHER INFORMATION: Nucleotides 12 & 16 are n wherein n = b and b =
OTHER INFORMATION: cytosine, inosine, uridine, 5-bromocytidine or
OTHER INFORMATION: 5-fluorouridine.
FEATURE:
OTHER INFORMATION: Description of Artificial Sequence:synthetic
OTHER INFORMATION: construct
US-09-206-866-24

Query Match 68.0%; Score 6.8; DB 3; Length 17;
Best Local Similarity 66.7%; Pred. No. 4e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 2 DANCCKTCG 10

Db 9 AACGTTTCG 1
:| ||:|

RESULT 61
US-09-206-866A-20/c
Sequence 20, Application US/09206866A
Patent No. 6268137
GENERAL INFORMATION:
APPLICANT: SZVF, Moshe
APPLICANT: BIGEY, Pascal
TITLE OF INVENTION: SPECIFIC INHIBITORS OF DNA METHYLTRANSFERASE
FILE REFERENCE: 106101.200
CURRENT APPLICATION NUMBER: US/09/206,866A
CURRENT FILING DATE: 1998-12-08
PRIOR APPLICATION NUMBER: US 08/653,954
PRIOR FILING DATE: 1996-05-22
PRIOR APPLICATION NUMBER: PCT/IB97/00879
PRIOR FILING DATE: 1997-05-22
PRIOR APPLICATION NUMBER: US 60/069,812
PRIOR FILING DATE: 1997-12-17
PRIOR APPLICATION NUMBER: US 09/194,284
PRIOR FILING DATE: 1998-11-23
NUMBER OF SEQ ID NOS: 41
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 20
LENGTH: 17
TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
NAME/KEY: misc feature
LOCATION: (1)..(17)
OTHER INFORMATION: Nucleotides 1-17 contain c, t, a & g wherein
OTHER INFORMATION: c=cytidine; t=thymidine; a=adenosine; g=guanosine;
OTHER INFORMATION: m is a methyl group at the 5-position of
OTHER INFORMATION: nucleotides 1 & 5 of the cytosine portion of
OTHER INFORMATION: cytidine.
OTHER INFORMATION: Description of Artificial Sequence:synthetic
OTHER INFORMATION: construct
US-09-206-866A-20

Query Match 68.0%; Score 6.8; DB 3; Length 17;
Best Local Similarity 66.7%; Pred. No. 4e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 2 DANCCKTCG 10
:| ||:|

RESULT 62
US-09-206-866A-21/c
Sequence 21, Application US/09206866A
Patent No. 6268137
GENERAL INFORMATION:
APPLICANT: SZVF, Moshe
APPLICANT: BIGEY, Pascal
TITLE OF INVENTION: SPECIFIC INHIBITORS OF DNA METHYLTRANSFERASE
FILE REFERENCE: 106101.200
CURRENT APPLICATION NUMBER: US/09/206,866A
CURRENT FILING DATE: 1998-12-08
PRIOR APPLICATION NUMBER: US 08/653,954
PRIOR FILING DATE: 1996-05-22
PRIOR APPLICATION NUMBER: PCT/IB97/00879
PRIOR FILING DATE: 1997-05-22
PRIOR APPLICATION NUMBER: US 60/069,812
PRIOR FILING DATE: 1997-12-17
PRIOR APPLICATION NUMBER: US 09/194,284
PRIOR FILING DATE: 1998-11-23
NUMBER OF SEQ ID NOS: 41
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 21
LENGTH: 17

```
/ TYPE: DNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ NAME/KEY: misc feature
/ LOCATION: (1)..(17)
/ OTHER INFORMATION: Nucleotides 1-17 contain c, t, a & g wherein
/ OTHER INFORMATION: c=cytidine; t=thymidine; a=adenosine; g=guanosine;
/ OTHER INFORMATION: m is a methyl group at the 5-position of
/ OTHER INFORMATION: nucleotides 1 & 5 of the cytosine portion of
/ OTHER INFORMATION: cytidine.
/ NAME/KEY: misc feature
/ LOCATION: (1)..(16)
/ OTHER INFORMATION: Nucleotide 16 is n wherein n = i and i = inosine.
/ OTHER INFORMATION: Description of Artificial Sequence:synthetic
/ OTHER INFORMATION: construct
US-09-206-866A-21

Query Match      68.0%; Score 6.8; DB 3; Length 17;
Best Local Similarity 66.7%; Pred. No. 4e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY      2 DANCGRKTCG 10
      :|||:|
Db      9 AAACGTTTCG 1

RESULT 63
US-09-206-866A-22/c
; Sequence 22, Application US/09206866A
; Patent No. 6268137
; GENERAL INFORMATION:
; APPLICANT: SZYF, Moshe
; APPLICANT: BIGEY, Pascal
; TITLE OF INVENTION: SPECIFIC INHIBITORS OF DNA METHYLTRANSFERASE
; FILE REFERENCE: 106101.200
; CURRENT APPLICATION NUMBER: US 09/206,866A
; PRIOR FILING DATE: 1998-12-08
; PRIOR APPLICATION NUMBER: US 08/653,954
; PRIOR FILING DATE: 1996-05-22
; PRIOR APPLICATION NUMBER: PCT/IB97/00879
; PRIOR FILING DATE: 1997-05-22
; PRIOR APPLICATION NUMBER: US 60/069,812
; PRIOR FILING DATE: 1997-12-17
; PRIOR APPLICATION NUMBER: US 09/194,284
; PRIOR FILING DATE: 1998-11-23
; NUMBER OF SEQ ID NOS: 41
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 22
; LENGTH: 17
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)..(17)
; OTHER INFORMATION: Nucleotides 1-17 contain c, t, a & g wherein
; OTHER INFORMATION: c=cytidine; t=thymidine; a=adenosine; g=guanosine;
; OTHER INFORMATION: m is a methyl group at the 5-position of
; OTHER INFORMATION: nucleotides 1 & 5 of the cytosine portion of
; OTHER INFORMATION: cytidine.
; NAME/KEY: misc feature
; LOCATION: (1)..(16)
; OTHER INFORMATION: Nucleotides 12 & 16 are n wherein n = f and f =
; OTHER INFORMATION: 5-fluorocytosine.
; OTHER INFORMATION: Description of Artificial Sequence:synthetic
; OTHER INFORMATION: construct
US-09-206-866A-23

Query Match      68.0%; Score 6.8; DB 3; Length 17;
Best Local Similarity 66.7%; Pred. No. 4e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY      2 DANCGRKTCG 10
      :|||:|
Db      9 AAACGTTTCG 1

RESULT 64
US-09-206-866A-23/c
; Sequence 23, Application US/09206866A
; Patent No. 6268137
; GENERAL INFORMATION:
; APPLICANT: SZYF, Moshe
; APPLICANT: BIGEY, Pascal
; TITLE OF INVENTION: SPECIFIC INHIBITORS OF DNA METHYLTRANSFERASE
; FILE REFERENCE: 106101.200
; CURRENT APPLICATION NUMBER: US 09/206,866A
; PRIOR FILING DATE: 1998-12-08
; PRIOR APPLICATION NUMBER: US 08/653,954
; PRIOR FILING DATE: 1996-05-22
; PRIOR APPLICATION NUMBER: PCT/IB97/00879
; PRIOR FILING DATE: 1997-05-22
; PRIOR APPLICATION NUMBER: US 60/069,812
; PRIOR FILING DATE: 1997-12-17
; PRIOR APPLICATION NUMBER: US 09/194,284
; PRIOR FILING DATE: 1998-11-23
; NUMBER OF SEQ ID NOS: 41
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 23
; LENGTH: 17
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)..(17)
; OTHER INFORMATION: Nucleotides 1-17 contain c, t, a & g wherein
; OTHER INFORMATION: c=cytidine; t=thymidine; a=adenosine; g=guanosine;
; OTHER INFORMATION: m is a methyl group at the 5-position of
; OTHER INFORMATION: nucleotides 1 & 5 of the cytosine portion of
; OTHER INFORMATION: cytidine.
; NAME/KEY: misc feature
; LOCATION: (1)..(16)
; OTHER INFORMATION: Nucleotides 12 & 16 are n wherein n = f and f =
; OTHER INFORMATION: 5-fluorocytosine.
; OTHER INFORMATION: Description of Artificial Sequence:synthetic
; OTHER INFORMATION: construct
US-09-206-866A-23

Query Match      68.0%; Score 6.8; DB 3; Length 17;
Best Local Similarity 66.7%; Pred. No. 4e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY      2 DANCGRKTCG 10
      :|||:|
Db      9 AAACGTTTCG 1

RESULT 65
US-09-206-866A-24/c
; Sequence 24, Application US/09206866A
; Patent No. 6268137
; GENERAL INFORMATION:
; APPLICANT: SZYF, Moshe
; APPLICANT: BIGEY, Pascal
; TITLE OF INVENTION: SPECIFIC INHIBITORS OF DNA METHYLTRANSFERASE
; FILE REFERENCE: 106101.200
; CURRENT APPLICATION NUMBER: US 09/206,866A
; PRIOR FILING DATE: 1998-12-08
; PRIOR APPLICATION NUMBER: US 08/653,954
; PRIOR FILING DATE: 1996-05-22
; PRIOR APPLICATION NUMBER: PCT/IB97/00879
; PRIOR FILING DATE: 1997-05-22
; PRIOR APPLICATION NUMBER: US 60/069,812
; PRIOR FILING DATE: 1997-12-17
; PRIOR APPLICATION NUMBER: US 09/194,284
; PRIOR FILING DATE: 1998-11-23
; NUMBER OF SEQ ID NOS: 41
; SOFTWARE: PatentIn Ver. 2.0
```

```
/ TYPE: DNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ NAME/KEY: misc feature
/ LOCATION: (1)..(17)
/ OTHER INFORMATION: Nucleotides 1-17 contain c, t, a & g wherein
/ OTHER INFORMATION: c=cytidine; t=thymidine; a=adenosine; g=guanosine;
/ OTHER INFORMATION: m is a methyl group at the 5-position of
/ OTHER INFORMATION: nucleotides 1 & 5 of the cytosine portion of
/ OTHER INFORMATION: cytidine.
/ NAME/KEY: misc feature
/ LOCATION: (1)..(16)
/ OTHER INFORMATION: Nucleotide 16 is n wherein n = u and u = uridine.
/ OTHER INFORMATION: Description of Artificial Sequence:synthetic
/ OTHER INFORMATION: construct
US-09-206-866A-22

Query Match      68.0%; Score 6.8; DB 3; Length 17;
Best Local Similarity 66.7%; Pred. No. 4e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY      2 DANCGRKTCG 10
      :|||:|
Db      9 AAACGTTTCG 1

RESULT 63
US-09-206-866A-22/c
; Sequence 22, Application US/09206866A
; Patent No. 6268137
; GENERAL INFORMATION:
; APPLICANT: SZYF, Moshe
; APPLICANT: BIGEY, Pascal
; TITLE OF INVENTION: SPECIFIC INHIBITORS OF DNA METHYLTRANSFERASE
; FILE REFERENCE: 106101.200
; CURRENT APPLICATION NUMBER: US 09/206,866A
; PRIOR FILING DATE: 1998-12-08
; PRIOR APPLICATION NUMBER: US 08/653,954
; PRIOR FILING DATE: 1996-05-22
; PRIOR APPLICATION NUMBER: PCT/IB97/00879
; PRIOR FILING DATE: 1997-05-22
; PRIOR APPLICATION NUMBER: US 60/069,812
; PRIOR FILING DATE: 1997-12-17
; PRIOR APPLICATION NUMBER: US 09/194,284
; PRIOR FILING DATE: 1998-11-23
; NUMBER OF SEQ ID NOS: 41
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 22
; LENGTH: 17
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)..(17)
; OTHER INFORMATION: Nucleotides 1-17 contain c, t, a & g wherein
; OTHER INFORMATION: c=cytidine; t=thymidine; a=adenosine; g=guanosine;
; OTHER INFORMATION: m is a methyl group at the 5-position of
; OTHER INFORMATION: nucleotides 1 & 5 of the cytosine portion of
; OTHER INFORMATION: cytidine.
; NAME/KEY: misc feature
; LOCATION: (1)..(16)
; OTHER INFORMATION: Nucleotide 16 is n wherein n = u and u = uridine.
; OTHER INFORMATION: Description of Artificial Sequence:synthetic
; OTHER INFORMATION: construct
US-09-206-866A-22

Query Match      68.0%; Score 6.8; DB 3; Length 17;
Best Local Similarity 66.7%; Pred. No. 4e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY      2 DANCGRKTCG 10
      :|||:|
Db      9 AAACGTTTCG 1
```

; SEQ ID NO 24
; LENGTH: 17
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)..(17)
; OTHER INFORMATION: Nucleotides 1-17 contain c, t, a & g wherein
; OTHER INFORMATION: c=cytidine; t=thymidine; a=adenosine; g=guanosine;
; OTHER INFORMATION: m is a methyl group at the 5-position of
; OTHER INFORMATION: nucleotides 1 & 5 of the cytosine portion of
; OTHER INFORMATION: cytidine.
; NAME/KEY: misc feature
; LOCATION: (1)..(16)
; OTHER INFORMATION: Nucleotides 12 & 16 are n wherein n = b and b =
; OTHER INFORMATION: cytosine, inosine, uridine, 5-bromocytidine or
; OTHER INFORMATION: 5-fluorouridine.
; OTHER INFORMATION: Description of Artificial Sequence:synthetic
; OTHER INFORMATION: construct
US-09-206-866A-24

Query Match 68.0%; Score 6.8; DB 3; Length 17;
Best Local Similarity 66.7%; Pred. No. 4e+04; 1; Indels 0; Gaps 0;
Matches 6; Conservative 2; Mismatches 0;

QY 2 DANCCKTCG 10
: |||:
Db 9 AACGTTGC 1

RESULT 66

US-09-431-419A-71
; Sequence 71, Application US/09431419A
; Patent No. 6458567
; GENERAL INFORMATION:
; APPLICANT: Barber, Jack R.
; APPLICANT: Welch, Peter J.
; APPLICANT: Tritz, Richard
; APPLICANT: Yei, Soonpin
; APPLICANT: Yu, Mang
; TITLE OF INVENTION: HEPATITIS C VIRUS RIBOZYMES
; FILE REFERENCE: 480124.403C3
; CURRENT APPLICATION NUMBER: US/09/431.419A
; CURRENT FILING DATE: 1999-11-01
; NUMBER OF SEQ ID NOS: 73
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 71
; LENGTH: 17
; TYPE: RNA
; ORGANISM: Hepatitis C Virus
US-09-431-419A-71

Query Match 68.0%; Score 6.8; DB 3; Length 17;
Best Local Similarity 55.6%; Pred. No. 4e+04; 1; Indels 0; Gaps 0;
Matches 5; Conservative 3; Mismatches 1;

QY 2 DANCCKTCG 10
: |||:
Db 1 GACGGGUC 9

RESULT 67

US-09-469-211A-13/c
; Sequence 13, Application US/09469211A
; Patent No. 6660524
; GENERAL INFORMATION:
; APPLICANT: J. Turck
; APPLICANT: J. Archer
; TITLE OF INVENTION: CONTROL OF GENE EXPRESSION IN EUKARYOTES
; FILE REFERENCE: 9341-021
; CURRENT APPLICATION NUMBER: US/09/469.211A
; CURRENT FILING DATE: 1999-12-22
; PRIOR APPLICATION NUMBER: UK 9828660.2

; PRIOR FILING DATE: 1998-12-24
; NUMBER OF SEQ ID NOS: 19
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 13
; LENGTH: 17
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial
; OTHER INFORMATION: Sequence:op2
US-09-469-211A-13

Query Match 68.0%; Score 6.8; DB 4; Length 17;
Best Local Similarity 66.7%; Pred. No. 4e+04; 1; Indels 0; Gaps 0;
Matches 6; Conservative 2; Mismatches 1;

QY 2 DANCCKTCG 10
: |||:
Db 14 TAGCGGTCG 6

RESULT 68

US-08-072-282-8/c
; Sequence 8, Application US/08072282
; Patent No. 5420009
; GENERAL INFORMATION:
; APPLICANT: Hartung, John S.
; APPLICANT: Pruvost, Olivier P.
; TITLE OF INVENTION: Probes and Primers for the Specific
; TITLE OF INVENTION: Detection of Xanthomonas campestris pv. citri
; NUMBER OF SEQUENCES: 8
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Janelle S. Graeter
; STREET: Building 005, Room 411, BARC-W
; CITY: Beltsville
; STATE: Maryland
; COUNTRY: U.S.A.
; ZIP: 20705
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/072,282
; FILING DATE: 19930609
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/855,804
; FILING DATE: 23-MAR-1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Graeter, Janelle S.
; REGISTRATION NUMBER: 35,024
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (301)504-5676
; TELEFAX: (301)504-5060
; INFORMATION FOR SEQ ID NO: 8:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 18 base pairs
; TYPE: NUCLEIC ACID
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; HYPOTHETICAL: NO
; ANTI-SENSE: NO
; ORIGINAL SOURCE:
; ORGANISM: Xanthomonas campestris
; STRAIN: Pathovar citri, strain XC62
US-08-072-282-8

Query Match 68.0%; Score 6.8; DB 1; Length 18;
Best Local Similarity 66.7%; Pred. No. 4e+04; 1; Indels 0; Gaps 0;
Matches 6; Conservative 2; Mismatches 1;

```
QY      2 DANCCKTCG 10
      :||:||||
Db      14 GAACGGTCG 6

RESULT 69
US-08-758-306-1373
; Sequence 1373, Application US/08758306
; Patent No. 5807743
; GENERAL INFORMATION:
; APPLICANT: Stinchcomb, Dan T.
; TITLE OF INVENTION: METHOD AND REAGENT FOR THE
; TITLE OF INVENTION: TREATMENT OF DISEASES
; TITLE OF INVENTION: ASSOCIATED WITH
; TITLE OF INVENTION: INTERLEUKIN-2 RECEPTOR
; TITLE OF INVENTION: GAMMA-CHAIN EXPRESSION
; NUMBER OF SEQUENCES: 1379
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Lyon & Lyon
; STREET: 633 West Fifth Street
; STREET: Suite 4700
; CITY: Los Angeles
; STATE: California
; COUNTRY: U.S.A.
; ZIP: 90071-2066
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
; MEDIUM TYPE: storage
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: IBM P.C. DOS 5.0
; SOFTWARE: FastSeq Version 1.5
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/758,306
; FILING DATE: December 3, 1996
; CLASSIFICATION: 514
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER:
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: Warburg, Richard J.
; REGISTRATION NUMBER: 32,327
; REFERENCE/DOCKET NUMBER: 212/132
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (213) 489-1600
; TELEFAX: (213) 955-0440
; TELEX: 67-3510
; INFORMATION FOR SEQ ID NO: 1373:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 18 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; US-08-758-306-1373

Query Match      68.0%; Score 6.8; DB 1; Length 18;
Best Local Similarity 55.6%; Pred. No. 4e+04;
Matches 5; Conservative 3; Mismatches 1; Indels 0; Gaps 0;

QY      2 DANCCKTCG 10
      :||:||||
Db      3 GAACGGUCG 11

RESULT 70
US-08-928-692-68/c
; Sequence 68, Application US/08928692
; Patent No. 5958727
; GENERAL INFORMATION:
; APPLICANT: Brody, Howard
; APPLICANT: Yaver, Deborah S.
; APPLICANT: Lamsa, Michael

; APPLICANT: Hansen, Kim
; TITLE OF INVENTION: Methods for Modifying the Production of
; TITLE OF INVENTION: a Polypeptide
; NUMBER OF SEQUENCES: 80
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: No. 5958727o No. 5958727disk of No. 5958727th America, Inc.
; STREET: 405 Lexington Avenue
; CITY: New York
; STATE: NY
; COUNTRY: USA
; ZIP: 10174
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: FastSeq for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/928,692
; FILING DATE: 12-SEPT-1997
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Lambiris, Elias J
; REGISTRATION NUMBER: 33,728
; REFERENCE/DOCKET NUMBER: 4944.200-US
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 212-867-0123
; TELEFAX: 212-878-9655
; INFORMATION FOR SEQ ID NO: 68:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 18 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; US-08-928-692-68

Query Match      68.0%; Score 6.8; DB 2; Length 18;
Best Local Similarity 66.7%; Pred. No. 4e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY      2 DANCCKTCG 10
      :||:||||
Db      15 AACCGGTCG 7

RESULT 71
US-08-637-732A-22
; Sequence 22, Application US/08637732A
; Patent No. 6268171
; GENERAL INFORMATION:
; APPLICANT: Meyer, Thomas F.F.
; APPLICANT: Rudel, Thomas
; APPLICANT: Ryll, Roland R.
; APPLICANT: Scheuerfleug, Ina B.
; TITLE OF INVENTION: Recombinant Filc Proteins, Process for
; TITLE OF INVENTION: Producing Them and Their Use
; NUMBER OF SEQUENCES: 40
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Birch, Stewart, Kolasch & Birch, LLP
; STREET: P.O. Box 747
; CITY: Falls Church
; STATE: Virginia
; COUNTRY: USA
; ZIP: 22040-0747
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/637,732A
; FILING DATE: 28-JUN-1996
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
```

NAME: Svensson, Leonard R.
REGISTRATION NUMBER: 30330
REFERENCE/DOCKET NUMBER: 147-155P(PCT)
TELECOMMUNICATION INFORMATION:
TELEPHONE: 703-205-8000
TELEFAX: 703-205-8050
INFORMATION FOR SEQ ID NO: 22:
SEQUENCE CHARACTERISTICS:
LENGTH: 18 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: other nucleic acid
DESCRIPTION: /desc = "PCR primer T5c"
US-08-637-732A-22

Query Match 68.0%; Score 6.8; DB 3; Length 18;
Best Local Similarity 66.7%; Pred. No. 4e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGRKTCG 10
: ||: |||
DB 10 TAGCGGTTCG 18

RESULT 72

US-09-339-972-68/c
Sequence 68, Application US/09339972
Patent No. 6323002
GENERAL INFORMATION:
APPLICANT: Brody, Howard
APPLICANT: Yaver, Deborah S.
APPLICANT: Lamsa, Michael
APPLICANT: Hansen, Kim
TITLE OF INVENTION: Methods for Modifying the Production of
a Polypeptide
NUMBER OF SEQUENCES: 80
CORRESPONDENCE ADDRESS:
ADDRESSEE: No. 63230020 No. 6323002disk of No. 6323002th America, Inc.
STREET: 405 Lexington Avenue
CITY: New York
STATE: NY
COUNTRY: USA
ZIP: 10174
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/339,972
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/928,692
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Lambiris, Elias J
REGISTRATION NUMBER: 33,728
REFERENCE/DOCKET NUMBER: 4944,200-US
TELECOMMUNICATION INFORMATION:
TELEPHONE: 212-867-0123
TELEFAX: 212-878-9655
INFORMATION FOR SEQ ID NO: 68:
SEQUENCE CHARACTERISTICS:
LENGTH: 18 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
US-09-339-972-68

Query Match 68.0%; Score 6.8; DB 3; Length 18;
Best Local Similarity 66.7%; Pred. No. 4e+04;

Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
QY 2 DANCGRKTCG 10
: ||: |||
DB 15 AACCGGTTCG 7

RESULT 73

US-09-157-257-14
Sequence 14, Application US/09157257
Patent No. 6375954
GENERAL INFORMATION:
APPLICANT: DUTTA, Sukanta K.
APPLICANT: BISWAS, Biswajit
APPLICANT: VENULAPALLI, Ramesh
TITLE OF INVENTION: A SIZE-VARIABLE STRAIN-SPECIFIC PROTECTIVE ANTIGEN FOR
POTOMAC HORSE FEVER
FILE REFERENCE: 8172-9016
CURRENT APPLICATION NUMBER: US/09/157,257
CURRENT FILING DATE: 1998-09-18
EARLIER APPLICATION NUMBER: 60/059,252
EARLIER FILING DATE: 1997-09-18
NUMBER OF SEQ ID NOS: 48
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 14
LENGTH: 18
TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Description of Artificial Sequence: primer
US-09-157-257-14

Query Match 68.0%; Score 6.8; DB 3; Length 18;
Best Local Similarity 66.7%; Pred. No. 4e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGRKTCG 10
: ||: |||
DB 6 TATCGTTCG 14

RESULT 74

US-09-728-498A-4
Sequence 4, Application US/09728498A
Patent No. 6623946
GENERAL INFORMATION:
APPLICANT: MOCKEL, BETTINA
APPLICANT: PFEFFERLE, WALTER
APPLICANT: MARX, ACHIM
TITLE OF INVENTION: NEW NUCLEOTIDE SEQUENCES ENCODING THE SUCC AND SUCD
GENES
FILE REFERENCE: PM 275338 990171 BT
CURRENT APPLICATION NUMBER: US/09/728,498A
CURRENT FILING DATE: 2001-08-31
PRIOR APPLICATION NUMBER: DE 199 56 686.0
PRIOR FILING DATE: 1999-11-25
NUMBER OF SEQ ID NOS: 9
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 4
LENGTH: 18
TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Description of Artificial Sequence: Primer
US-09-728-498A-4

Query Match 68.0%; Score 6.8; DB 4; Length 18;
Best Local Similarity 66.7%; Pred. No. 4e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGRKTCG 10
: ||: |||
DB 7 AATCGTTCG 15

RESULT 75
US-09-083-268-9
; Sequence 9, Application US/09083268
; Patent No. 6673535
; GENERAL INFORMATION:
; APPLICANT: Pulst, Stefan M
; TITLE OF INVENTION: NUCLEIC ACID ENCODING SPINOCEREBELLAR
; TITLE OF INVENTION: ATAXIA-2 AND PRODUCTS RELATED THERETO
; NUMBER OF SEQUENCES: 18
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Muetting, Raasch & Gebhardt, P.A.
; STREET: 119 No. 6673535th Fourth Street
; CITY: Minneapolis
; STATE: Minnesota
; COUNTRY: USA
; ZIP: 55401
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/083,268
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/727,084
; FILING DATE: 08-OCT-1996
; ATTORNEY/AGENT INFORMATION:
; NAME: McCormack, Myra H
; REGISTRATION NUMBER: 36,602
; REFERENCE/DOCKET NUMBER: 232.00010101
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 612/305-1220
; TELEFAX: 612/305-1228
; INFORMATION FOR SEQ ID NO: 9:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 18 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-09-083-268-9
Query Match 68.0%; Score 6.8; DB 4; Length 18;
Best Local Similarity 66.7%; Pred. No. 4e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 2 DANCGKTCG 10
Db 3 AACCGTGC 11

RESULT 76
5245022-20/c
; Patent No. 5245022
; APPLICANT: WEIS, ALEXANDER L.; OAKES, FRED T.; HAUSHEER,
; FREDERICK H.; CAVANAUGH, PAUL F. JR.; MOSKWA, PATRICIA S.
; TITLE OF INVENTION: EXONUCLEASE RESISTANT TERMINALLY
; SUBSTITUTED OLIGONUCLEOTIDES
; NUMBER OF SEQUENCES: 35
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/562,180
; FILING DATE: 03-AUG-1990
; SEQ ID NO: 20:
; LENGTH: 18
5245022-20
Query Match 68.0%; Score 6.8; DB 6; Length 18;
Best Local Similarity 66.7%; Pred. No. 4e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 2 DANCGKTCG 10
Db 11 AACCGTGC 3

RESULT 77
5245022-20/c
; Patent No. 5245022
; APPLICANT: WEIS, ALEXANDER L.; OAKES, FRED T.; HAUSHEER,
; FREDERICK H.; CAVANAUGH, PAUL F. JR.; MOSKWA, PATRICIA S.
; TITLE OF INVENTION: EXONUCLEASE RESISTANT TERMINALLY
; SUBSTITUTED OLIGONUCLEOTIDES
; NUMBER OF SEQUENCES: 35
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/562,180
; FILING DATE: 03-AUG-1990
; SEQ ID NO: 20:
; LENGTH: 18
5245022-20
Query Match 68.0%; Score 6.8; DB 6; Length 18;
Best Local Similarity 66.7%; Pred. No. 4e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 2 DANCGKTCG 10
Db 11 AACCGTGC 3

RESULT 78
US-07-991-855-62/c
; Sequence 62, Application 07/991855
; Patent No. 5420032
; GENERAL INFORMATION:
; APPLICANT: Marshall, Philip
; APPLICANT: Lemieux, Claude
; TITLE OF INVENTION: Homing Endonuclease Which Originates
; TITLE OF INVENTION: From Chlamydomonas Eugametos and Recognizes a
; TITLE OF INVENTION: 15, 17 or 19 Degenerate Double Stranded Nucleotide
; TITLE OF INVENTION: Sequence
; NUMBER OF SEQUENCES: 74
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Merchant & Gould
; STREET: 3100 No. 5420032west Center
; CITY: Minneapolis
; STATE: MN
; COUNTRY: USA
; ZIP: 55402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: 07/991,855
; FILING DATE: 16-DEC-1992
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/813,129
; FILING DATE: 23-DEC-1991
; ATTORNEY/AGENT INFORMATION:
; NAME: Woessner, Warren D.
; REGISTRATION NUMBER: 30,440
; REFERENCE/DOCKET NUMBER: 9555.18-US-01
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 612-332-5300
; TELEFAX: 612-332-9081
; INFORMATION FOR SEQ ID NO: 62:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 19 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single

```
;
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-07-991-855-62

Query Match      68.0%; Score 6.8; DB 1; Length 19;
Best Local Similarity 66.7%; Pred. No. 4e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
DB 19 GAACGGTCG 11

RESULT 79
US-07-991-855-64/c
; Sequence 64, Application 07/991855
; Patent No. 5420032
; GENERAL INFORMATION:
; APPLICANT: Marshall, Philip
; TITLE OF INVENTION: Homing Endonuclease Which Originates
; TITLE OF INVENTION: From Chlamydomonas Eugametos and Recognizes and Cleaves a
; TITLE OF INVENTION: 15, 17 or 19 Degenerate Doublee Stranded Nucleotide
; TITLE OF INVENTION: Sequence
; NUMBER OF SEQUENCES: 74
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Merchant & Gould
; STREET: 3100 No. 5420032west Center
; CITY: Minneapolis
; STATE: MN
; COUNTRY: USA
; ZIP: 55402
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: 07/991,855
; FILING DATE: 16-DEC-1992
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/813,129
; FILING DATE: 23-DEC-1991
; ATTORNEY/AGENT INFORMATION:
; NAME: Woessner, Warren D.
; REGISTRATION NUMBER: 30,440
; REFERENCE/DOCKET NUMBER: 9555.18-US-01
; TELEPHONE: 612-332-5300
; TELEFAX: 612-332-9081
; INFORMATION FOR SEQ ID NO: 64:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 19 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-07-991-855-64

Query Match      68.0%; Score 6.8; DB 1; Length 19;
Best Local Similarity 66.7%; Pred. No. 4e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
DB 19 TAGCGTCG 11

RESULT 80
US-09-050-559C-16/c
; Sequence 16, Application US/09050559C
; Patent No. 6096502
```

```
;
; GENERAL INFORMATION:
; APPLICANT: Sam S-K Lee
; TITLE OF INVENTION: NOVEL SUBSTRATE FOR DETECTING UL9
; TITLE OF INVENTION: HELICASE ACTIVITY
; NUMBER OF SEQUENCES: 37
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: David J. Weitz, Wilson Sonsini Goodrich
; ADDRESSEE: & Rosati
; STREET: 650 Page Mill Road
; CITY: Palo Alto
; STATE: California
; COUNTRY: USA
; ZIP: 94304-1050
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5 inch diskette
; COMPUTER: IBM compatible
; OPERATING SYSTEM: Microsoft Windows 95/DOS 5.0
; SOFTWARE: Wordperfect for windows 6.0,
; SOFTWARE: ASCII (DOS) TEXT format
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/050,559C
; FILING DATE:
; CLASSIFICATION: 536
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER:
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: David J. Weitz
; REGISTRATION NUMBER: 38,362
; REFERENCE/DOCKET NUMBER: 16842-746
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (650) 493-9300
; TELEFAX: (650) 493-6811
; INFORMATION FOR SEQ ID NO: 16:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 19 nucleotides
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
US-09-050-559C-16

Query Match      68.0%; Score 6.8; DB 3; Length 19;
Best Local Similarity 66.7%; Pred. No. 4e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
DB 19 AAGCGTCG 11

RESULT 81
US-09-216-393B-333
; Sequence 333, Application US/09216393B
; Patent No. 6514694
; GENERAL INFORMATION:
; APPLICANT: Milhausen, Michael James
; TITLE OF INVENTION: TOXOPLASMA GONDII PROTEINS, NUCLEIC ACID MOLECULES, AND USES THERE
; FILE REFERENCE: TX-1-C2
; CURRENT APPLICATION NUMBER: US/09/216,393B
; CURRENT FILING DATE: 1998-12-18
; PRIOR APPLICATION NUMBER: 08/994,825
; PRIOR FILING DATE: 1997-12-19
; NUMBER OF SEQ ID NOS: 366
; SOFTWARE: Patent in version 3.1
; SEQ ID NO 333
; LENGTH: 19
; TYPE: DNA
; ORGANISM: Artificial sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Primer
US-09-216-393B-333

Query Match      68.0%; Score 6.8; DB 4; Length 19;
```

Best Local Similarity 66.7%; Pred. No. 4e+04; Indels 1; Gaps 0;
 Matches 6; Conservative 2; Mismatches 1; Indels 1; Gaps 0;
 QY 2 DANCCKTCG 10
 Db 6 AACGGTTCG 14

RESULT 82
 US-09-672-717-16/c
 ; Sequence 16, Application US/09672717
 ; Patent No. 6673917
 ; GENERAL INFORMATION:
 ; APPLICANT: Korneluk, Robert G.
 ; APPLICANT: LaCasse, Eric
 ; APPLICANT: Baird, Stephen
 ; APPLICANT: Holcik, Martin
 ; APPLICANT: Young, Sean
 ; TITLE OF INVENTION: Antisense IAP Nucleic Acids and Uses
 ; FILE REFERENCE: 07891/025001
 ; CURRENT FILING DATE: 2000-09-28
 ; NUMBER OF SEQ ID NOS: 231
 ; SOFTWARE: FastSeq for Windows Version 4.0
 ; SEQ ID NO 16
 ; LENGTH: 19
 ; TYPE: DNA
 ; ORGANISM: Artificial Sequence
 ; FEATURE:
 ; OTHER INFORMATION: based on Homo sapiens
 US-09-672-717-16

Query Match 68.0%; Score 6.8; DB 4; Length 19;
 Best Local Similarity 66.7%; Pred. No. 4e+04; Indels 1; Gaps 0;
 Matches 6; Conservative 2; Mismatches 1; Indels 1; Gaps 0;
 QY 2 DANCCKTCG 10
 Db 12 TAGCGGTCG 4

RESULT 83
 US-08-983-605-299
 ; Sequence 299, Application US/08983605A
 ; Patent No. 6720137
 ; GENERAL INFORMATION:
 ; APPLICANT: Roder, Marion
 ; TITLE OF INVENTION: Microsatellite Markers for Plants of the Species
 ; TITLE OF INVENTION: Triticum aestivum and Tribe Triticeae and the Use of
 ; TITLE OF INVENTION: Said Markers
 ; FILE REFERENCE: 2936.10400
 ; CURRENT APPLICATION NUMBER: US/08/983,605A
 ; CURRENT FILING DATE: 1998-05-01
 ; EARLIER APPLICATION NUMBER: DE 195 25 284.5
 ; EARLIER FILING DATE: 1995-06-28
 ; NUMBER OF SEQ ID NOS: 466
 ; SOFTWARE: PatentIn Ver. 2.0
 ; SEQ ID NO 299
 ; LENGTH: 19
 ; TYPE: DNA
 ; ORGANISM: Triticum aestivum
 US-08-983-605-299

Query Match 68.0%; Score 6.8; DB 4; Length 19;
 Best Local Similarity 66.7%; Pred. No. 4e+04; Indels 1; Gaps 0;
 Matches 6; Conservative 2; Mismatches 1; Indels 1; Gaps 0;
 QY 2 DANCCKTCG 10
 Db 9 TAGCGGTCG 17

RESULT 84
 US-07-889-651-6/c
 ; Sequence 6, Application US/07889651
 ; Patent No. 5352580
 ; GENERAL INFORMATION:
 ; APPLICANT: Spears, Patricia A.
 ; APPLICANT: Shank, Daryl D.
 ; TITLE OF INVENTION: Mycobacteria Probes
 ; NUMBER OF SEQUENCES: 25
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: Richard J. Rodrick
 ; STREET: 1 Becton Drive
 ; CITY: Franklin Lakes
 ; STATE: New Jersey
 ; COUNTRY: USA
 ; ZIP: 07417-1880
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Floppy disk
 ; COMPUTER: IBM PC compatible
 ; OPERATING SYSTEM: PC-DOS/MS-DOS
 ; SOFTWARE: PatentIn Release #1.0, Version #1.25
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/07/889,651
 ; FILING DATE: 19920526
 ; CLASSIFICATION: 435
 ; ATTORNEY/AGENT INFORMATION:
 ; NAME: Stierwalt, Brian K.
 ; REGISTRATION NUMBER: 33,213
 ; REFERENCE/DOCKET NUMBER: P-2512
 ; TELECOMMUNICATION INFORMATION:
 ; TELEPHONE: 201-847-5317
 ; TELEFAX: 201-848-9228
 ; INFORMATION FOR SEQ ID NO: 6:
 ; SEQUENCE CHARACTERISTICS:
 ; LENGTH: 20 base pairs
 ; TYPE: NUCLEIC ACID
 ; STRANDEDNESS: single
 ; TOPOLOGY: linear
 ; MOLECULE TYPE: cDNA
 US-07-889-651-6

Query Match 68.0%; Score 6.8; DB 1; Length 20;
 Best Local Similarity 66.7%; Pred. No. 3.9e+04; Indels 1; Gaps 0;
 Matches 6; Conservative 2; Mismatches 1; Indels 1; Gaps 0;
 QY 2 DANCCKTCG 10
 Db 17 AATCGTTCG 9

RESULT 85
 US-07-963-490-3/c
 ; Sequence 3, Application US/07963490
 ; Patent No. 5552310
 ; GENERAL INFORMATION:
 ; APPLICANT: YOSHIKURA, Hiroshi
 ; APPLICANT: SHIMIZU, Yoshio
 ; APPLICANT: IWAMOTO, Aikichi
 ; APPLICANT: HIJIKATA, Minako
 ; TITLE OF INVENTION: REPLICATION OF HEPATITIS C VIRUS GENOME
 ; TITLE OF INVENTION: AND IDENTIFICATION OF VIRUS HAVING HIGH INFECTIVITY
 ; NUMBER OF SEQUENCES: 8
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: WEGNER, CANTOR, MUELLER & PLAYER
 ; STREET: 1233 20th Street, N.W., Suite 300
 ; CITY: Washington
 ; STATE: D.C.
 ; COUNTRY: U.S.A.
 ; ZIP: 20036-8218
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Floppy disk
 ; COMPUTER: IBM PC compatible
 ; OPERATING SYSTEM: PC-DOS/MS-DOS

```
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/07/963,490
; FILING DATE: 20-OCT-1992
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: JP 4-153786
; FILING DATE: 12-JUN-1992
; APPLICATION DATA:
; APPLICATION NUMBER: JP 4-304351
; FILING DATE: 19-OCT-1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Cantor, Herbert I.
; REGISTRATION NUMBER: 24,392
; REFERENCE/DOCKET NUMBER: P-450-23593
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (202) 835-0605
; TELEFAX: (202) 835-0605
; TELEX: 440706 and 248394
; INFORMATION FOR SEQ ID NO: 3:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 20 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
; US-07-963-490-3

Query Match      68.0%; Score 6.8; DB 1; Length 20;
Best Local Similarity 66.7%; Pred. No. 3.9e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
```

```
QY      2 DANCGRKTCG 10
        :|||:|||
Db      10 GACCGTTCG 2
```

```
RESULT 86
US-08-502-185-24/c
; Sequence 24, Application US/08502185
; Patent No. 5639736
; GENERAL INFORMATION:
; APPLICANT: Robinson, Gregory S.
; TITLE OF INVENTION: Human VEGF-Specific
; TITLE OF INVENTION: Oligonucleotides
; NUMBER OF SEQUENCES: 53
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Lappin & Kusmer
; STREET: 200 State Street
; CITY: Boston
; STATE: Massachusetts
; COUNTRY: USA
; ZIP: 02109
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE:
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/502,185
; FILING DATE:
; CLASSIFICATION: 514
; ATTORNEY/AGENT INFORMATION:
; NAME: Kerner, Ann-Louise
; REGISTRATION NUMBER: 33,523
; REFERENCE/DOCKET NUMBER: HYZ-031CPDV1
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-330-1300
; TELEFAX: 617-330-1311
; INFORMATION FOR SEQ ID NO: 24:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 20 base pairs
; TYPE: nucleic acid
```

```
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: cDNA
; HYPOTHETICAL: NO
; ANTI-SENSE: YES
; US-08-502-185-24

Query Match      68.0%; Score 6.8; DB 1; Length 20;
Best Local Similarity 66.7%; Pred. No. 3.9e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY      2 DANCGRKTCG 10
        :|||:|||
Db      14 AACCGGTTCG 6

RESULT 87
US-08-398-945-24/c
; Sequence 24, Application US/08398945
; Patent No. 5639872
; GENERAL INFORMATION:
; APPLICANT: Robinson, Gregory S.
; TITLE OF INVENTION: Human VEGF-Specific
; TITLE OF INVENTION: Oligonucleotides
; NUMBER OF SEQUENCES: 53
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Lappin & Kusmer
; STREET: 200 State Street
; CITY: Boston
; STATE: Massachusetts
; COUNTRY: USA
; ZIP: 02109
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE:
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/398,945
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Kerner, Ann-Louise
; REGISTRATION NUMBER: 33,523
; REFERENCE/DOCKET NUMBER: HYZ-031CIP
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-330-1300
; TELEFAX: 617-330-1311
; INFORMATION FOR SEQ ID NO: 24:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 20 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: cDNA
; HYPOTHETICAL: NO
; ANTI-SENSE: YES
; US-08-398-945-24

Query Match      68.0%; Score 6.8; DB 1; Length 20;
Best Local Similarity 66.7%; Pred. No. 3.9e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY      2 DANCGRKTCG 10
        :|||:|||
Db      14 AACCGGTTCG 6

RESULT 88
US-08-501-779-24/c
; Sequence 24, Application US/08501779
; Patent No. 5661135
; GENERAL INFORMATION:
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APPLICANT: Robinson, Gregory S.
TITLE OF INVENTION: Human VEGF-Specific
NUMBER OF SEQUENCES: 53
CORRESPONDENCE ADDRESS:
ADDRESSEE: Lappin & Kusmer
STREET: 200 State Street
CITY: Boston
STATE: Massachusetts
COUNTRY: USA
ZIP: 02109
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE:
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/501,779
FILING DATE:
CLASSIFICATION: 514
ATTORNEY/AGENT INFORMATION:
NAME: Kerner, Ann-Louise
REGISTRATION NUMBER: 33,523
REFERENCE/DOCKET NUMBER: HYZ-031CPDV2
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-330-1300
TELEFAX: 617-330-1311
INFORMATION FOR SEQ ID NO: 24:
SEQUENCE CHARACTERISTICS:
LENGTH: 20 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: cDNA
HYPOTHETICAL: NO
ANTI-SENSE: YES
US-08-501-779-24

Query Match 68.0%; Score 6.8; DB 1; Length 20;
Best Local Similarity 66.7%; Pred. No. 3.9e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGKTCG 10
Db 14 AACGGGTCG 6

RESULT 89
US-08-501-713-24/c
Sequence 24, Application US/08501713
Patent No. 5710136
GENERAL INFORMATION:
APPLICANT: Robinson, Gregory S.
APPLICANT: Smith, Lois E.H.
TITLE OF INVENTION: Inhibition of
TITLE OF INVENTION: Neovascularization Using
TITLE OF INVENTION: VEGF-Specific
NUMBER OF SEQUENCES: 53
CORRESPONDENCE ADDRESS:
ADDRESSEE: Lappin & Kusmer
STREET: 200 State Street
CITY: Boston
STATE: Massachusetts
COUNTRY: USA
ZIP: 02109
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE:
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/501,713

FILING DATE:
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Kerner, Ann-Louise
REGISTRATION NUMBER: 33,523
REFERENCE/DOCKET NUMBER: HYZ-031DV2
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-330-1300
TELEFAX: 617-330-1311
INFORMATION FOR SEQ ID NO: 24:
SEQUENCE CHARACTERISTICS:
LENGTH: 20 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: cDNA
HYPOTHETICAL: NO
ANTI-SENSE: YES
US-08-501-713-24

Query Match 68.0%; Score 6.8; DB 1; Length 20;
Best Local Similarity 66.7%; Pred. No. 3.9e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGKTCG 10
Db 14 AACGGGTCG 6

RESULT 90
US-08-446-660-3/c
Sequence 3, Application US/08446660
Patent No. 5723328
GENERAL INFORMATION:
APPLICANT: Dalboege, Henrik
APPLICANT: Andersen, Lene N
APPLICANT: Kofed, Lene V
APPLICANT: Kauppinen, Markus S
APPLICANT: Christgau, Stephan
TITLE OF INVENTION: AN ENZYME WITH ENDOGLUCANASE ACTIVITY
NUMBER OF SEQUENCES: 19
CORRESPONDENCE ADDRESS:
ADDRESSEE: No. 5723328o No. 5723328disk of No. 5723328th America, Inc.
STREET: 405 Lexington Avenue, 64th Floor
CITY: New York
STATE: New York
COUNTRY: United States of America
ZIP: 10174-6401
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/446,660
FILING DATE: 26-MAY-1995
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Harrington, James J.
REGISTRATION NUMBER: 38,711
REFERENCE/DOCKET NUMBER: 3950.204-US
TELECOMMUNICATION INFORMATION:
TELEPHONE: 212-867-0123
TELEFAX: 212-878-9655
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 20 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
US-08-446-660-3

Query Match 68.0%; Score 6.8; DB 1; Length 20;

Best Local Similarity 66.7%; Pred. No. 3.9e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
Db 17 AATCGGTCG 9

RESULT 91
US-08-378-860-24/c
; Sequence 24, Application US/08378860
; Patent No. 5731294
; GENERAL INFORMATION:
; APPLICANT: Robinson, Gregory S.
; APPLICANT: Smith, Lois E.H.
; TITLE OF INVENTION: Inhibition of
; TITLE OF INVENTION: Neovascularization Using
; TITLE OF INVENTION: VEGF-Specific
; TITLE OF INVENTION: Oligonucleotides
; NUMBER OF SEQUENCES: 53
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Lappin & Kusmer
; STREET: 200 State Street
; CITY: Boston
; STATE: Massachusetts
; COUNTRY: USA
; ZIP: 02109
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE:
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/378,860
; FILING DATE:
; CLASSIFICATION: 514
; ATTORNEY/AGENT INFORMATION:
; NAME: Kerner, Ann-Louise
; REGISTRATION NUMBER: 33,523
; REFERENCE/DOCKET NUMBER: HYZ-031
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 617-330-1300
; TELEFAX: 617-330-1311
; INFORMATION FOR SEQ ID NO: 24:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 20 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: cDNA
; HYPOTHETICAL: NO
; ANTI-SENSE: YES
US-08-378-860-24

Query Match 68.0%; Score 6.8; DB 1; Length 20;
Best Local Similarity 66.7%; Pred. No. 3.9e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
Db 14 AAGCGGTCG 6

RESULT 92
US-08-623-891-4/c
; Sequence 4, Application US/08623891
; Patent No. 5795778
; GENERAL INFORMATION:
; APPLICANT: Kenneth G. Draper
; TITLE OF INVENTION: METHOD AND REAGENT FOR
; TITLE OF INVENTION: INHIBITING HERPES SIMPLEX
; TITLE OF INVENTION: VIRUS REPLICATION
; NUMBER OF SEQUENCES: 115

; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Lyon & Lyon
; STREET: 611 West Sixth Street
; CITY: Los Angeles
; STATE: California
; COUNTRY: USA
; ZIP: 90017
; COMPUTER READABLE FORM:
; MEDIUM TYPE: 3.5" Diskette, 1.44 Mb storage
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: IBM P.C. DOS (Version 5.0)
; SOFTWARE: WordPerfect (Version 5.1)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/623,891
; FILING DATE:
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/08/238,200
; FILING DATE:
; APPLICATION NUMBER: US/07/987,133
; FILING DATE:
; APPLICATION NUMBER: 07/882,921
; FILING DATE: May 14, 1992
; APPLICATION NUMBER: 07/948,359
; FILING DATE: September 18, 1992
; ATTORNEY/AGENT INFORMATION:
; NAME: Warburg, Richard J.
; REGISTRATION NUMBER: 32,327
; REFERENCE/DOCKET NUMBER: 200/209
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (213) 489-1600
; TELEFAX: (213) 955-0440
; TELEX: 67-3510
; INFORMATION FOR SEQ ID NO: 4:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 20
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
US-08-623-891-4

Query Match 68.0%; Score 6.8; DB 1; Length 20;
Best Local Similarity 66.7%; Pred. No. 3.9e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
Db 19 GACCGGTCG 11

RESULT 93
US-08-501-626-24/c
; Sequence 24, Application US/08501626
; Patent No. 5801156
; GENERAL INFORMATION:
; APPLICANT: Robinson, Gregory S.
; APPLICANT: Smith, Lois E.H.
; TITLE OF INVENTION: Inhibition of
; TITLE OF INVENTION: Neovascularization Using
; TITLE OF INVENTION: VEGF-Specific
; TITLE OF INVENTION: Oligonucleotides
; NUMBER OF SEQUENCES: 53
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Lappin & Kusmer
; STREET: 200 State Street
; CITY: Boston
; STATE: Massachusetts
; COUNTRY: USA
; ZIP: 02109
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE:
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/501,626
FILING DATE:
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Kerner, Ann-Louise
REGISTRATION NUMBER: 33,523
REFERENCE/DOCKET NUMBER: HYZ-031DV4
TELECOMMUNICATION INFORMATION:
TELEPHONE: 617-330-1300
TELEFAX: 617-330-1311
INFORMATION FOR SEQ ID NO: 24:
SEQUENCE CHARACTERISTICS:
LENGTH: 20 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: cDNA
HYPOTHETICAL: NO
ANTI-SENSE: YES
US-08-501-626-24

Query Match 68.0%; Score 6.8; DB 1; Length 20;
Best Local Similarity 66.7%; Pred. No. 3.9e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
Db 14 AACCGTCG 6

RESULT 94
US-08-418-859-11
Sequence 11, Application US/08418859
Patent No. 5811235
GENERAL INFORMATION:
APPLICANT: Jeffreys, Alec J.
TITLE OF INVENTION: METHOD OF
NUMBER OF SEQUENCES: 57
CORRESPONDENCE ADDRESS:
ADDRESSEE: Cushman, Darby & Cushman
STREET: 1100 New York Avenue, N.W.
CITY: Washington
STATE: D.C.
COUNTRY: U.S.A.
ZIP: 20005-3918
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 3.50 inch, 1.2 Mb
COMPUTER: IBM PS/2
OPERATING SYSTEM: PC-DOS 3.20
SOFTWARE: ASCII from WPS-PLUS
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/418,859
FILING DATE:
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/935,107
FILING DATE: 26 August 1992
APPLICATION NUMBER: 9118371.5
FILING DATE: 27-Aug-1991
APPLICATION NUMBER: 9119089.2
FILING DATE: 06-Sep-1991
APPLICATION NUMBER: 9124636.3
FILING DATE: 20-No. 5811235-1991
APPLICATION NUMBER: 9207379.0
FILING DATE: 03-Apr-1992
APPLICATION NUMBER: 9212627.5
FILING DATE: 15-Jun-1992
APPLICATION NUMBER: 9212881.8
FILING DATE: 17-Jun-1992
ATTORNEY/AGENT INFORMATION:
NAME: KOKULIS, PAUL N.
REGISTRATION NUMBER: 16,773
REFERENCE/DOCKET NUMBER: 97279/PHM.36520/US
TELECOMMUNICATION INFORMATION:
TELEPHONE: (292) 861-3000
TELEFAX: (202) 822-0944
INFORMATION FOR SEQ ID NO: 11:
SEQUENCE CHARACTERISTICS:
LENGTH: 20 Base Pairs

NAME: KOKULIS, PAUL N.
REGISTRATION NUMBER: 16,773
REFERENCE/DOCKET NUMBER: 97279/PHM.36520/US
TELECOMMUNICATION INFORMATION:
TELEPHONE: (292) 861-3000
TELEFAX: (202) 822-0944
INFORMATION FOR SEQ ID NO: 11:
SEQUENCE CHARACTERISTICS:
LENGTH: 20 Base Pairs
TYPE: Nucleic Acid
STRANDEDNESS: Single
TOPOLOGY: Linear
US-08-418-859-11

Query Match 68.0%; Score 6.8; DB 1; Length 20;
Best Local Similarity 66.7%; Pred. No. 3.9e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
Db 3 GACCCGTCG 11

RESULT 95
US-08-418-859-11/c
Sequence 11, Application US/08418859
Patent No. 5811235
GENERAL INFORMATION:
APPLICANT: Jeffreys, Alec J.
TITLE OF INVENTION: METHOD OF
NUMBER OF SEQUENCES: 57
CORRESPONDENCE ADDRESS:
ADDRESSEE: Cushman, Darby & Cushman
STREET: 1100 New York Avenue, N.W.
CITY: Washington
STATE: D.C.
COUNTRY: U.S.A.
ZIP: 20005-3918
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 3.50 inch, 1.2 Mb
COMPUTER: IBM PS/2
OPERATING SYSTEM: PC-DOS 3.20
SOFTWARE: ASCII from WPS-PLUS
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/418,859
FILING DATE:
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/935,107
FILING DATE: 26 August 1992
APPLICATION NUMBER: 9118371.5
FILING DATE: 27-Aug-1991
APPLICATION NUMBER: 9119089.2
FILING DATE: 06-Sep-1991
APPLICATION NUMBER: 9124636.3
FILING DATE: 20-No. 5811235-1991
APPLICATION NUMBER: 9207379.0
FILING DATE: 03-Apr-1992
APPLICATION NUMBER: 9212627.5
FILING DATE: 15-Jun-1992
APPLICATION NUMBER: 9212881.8
FILING DATE: 17-Jun-1992
ATTORNEY/AGENT INFORMATION:
NAME: KOKULIS, PAUL N.
REGISTRATION NUMBER: 16,773
REFERENCE/DOCKET NUMBER: 97279/PHM.36520/US
TELECOMMUNICATION INFORMATION:
TELEPHONE: (292) 861-3000
TELEFAX: (202) 822-0944
INFORMATION FOR SEQ ID NO: 11:
SEQUENCE CHARACTERISTICS:
LENGTH: 20 Base Pairs

APPLICATION NUMBER: US/08/643,181
FILING DATE: 26 August 1992
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/418,859
FILING DATE: 27-Aug-1991
APPLICATION NUMBER: 07/935,107
FILING DATE: 26 August 1992
APPLICATION NUMBER: 9118371.5
FILING DATE: 27-Aug-1991
APPLICATION NUMBER: 9119089.2
FILING DATE: 06-Sep-1991
APPLICATION NUMBER: 9124636.3
FILING DATE: 20-No. 5853989-1991
APPLICATION NUMBER: 9207379.0
FILING DATE: 03-Apr-1992
APPLICATION NUMBER: 9212627.5
FILING DATE: 15-Jun-1992
APPLICATION NUMBER: 9212881.8
FILING DATE: 17-Jun-1992
ATTORNEY/AGENT INFORMATION:
NAME: KOKULIS, PAUL N.
REGISTRATION NUMBER: 16,773
REFERENCE/DOCKET NUMBER: 97279/PHM.36520/US
TELECOMMUNICATION INFORMATION:
TELEPHONE: (292) 861-3000
TELEFAX: (202) 822-0944
INFORMATION FOR SEQ ID NO: 11:
LENGTH: 20 Base Pairs
TYPE: Nucleic Acid
STRANDEDNESS: Single
TOPOLOGY: Linear
US-08-643-181-11

Query Match 68.0%; Score 6.8; DB 2; Length 20;
Best Local Similarity 66.7%; Pred. No. 3.9e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: ||: |||
DB 3 GACCCGTCG 11

RESULT 99
US-08-643-181-11/c
Sequence 11, Application US/08643181
Patent No. 5853989
GENERAL INFORMATION:
APPLICANT: Jeffreys, Alec J.
TITLE OF INVENTION: METHOD OF
CHARACTERISATION
NUMBER OF SEQUENCES: 57
CORRESPONDENCE ADDRESS:
ADDRESSEE: Cushman, Darby & Cushman
STREET: 1100 New York Avenue, N.W.
CITY: Washington
STATE: D.C.
COUNTRY: U.S.A.
ZIP: 20005-3918
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 3.50 inch, 1.2 Mb
MEDIUM TYPE: storage
COMPUTER: IBM PS/2
OPERATING SYSTEM: PC-DOS 3.20
SOFTWARE: ASCII from WPS-PLUS
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/643,181
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/418,859
FILING DATE:

APPLICATION NUMBER: 07/935,107
FILING DATE: 26 August 1992
APPLICATION NUMBER: 9118371.5
FILING DATE: 27-Aug-1991
APPLICATION NUMBER: 9119089.2
FILING DATE: 06-Sep-1991
APPLICATION NUMBER: 9124636.3
FILING DATE: 20-No. 5853989-1991
APPLICATION NUMBER: 9207379.0
FILING DATE: 03-Apr-1992
APPLICATION NUMBER: 9212627.5
FILING DATE: 15-Jun-1992
APPLICATION NUMBER: 9212881.8
FILING DATE: 17-Jun-1992
ATTORNEY/AGENT INFORMATION:
NAME: KOKULIS, PAUL N.
REGISTRATION NUMBER: 16,773
REFERENCE/DOCKET NUMBER: 97279/PHM.36520/US
TELECOMMUNICATION INFORMATION:
TELEPHONE: (292) 861-3000
TELEFAX: (202) 822-0944
INFORMATION FOR SEQ ID NO: 11:
LENGTH: 20 Base Pairs
TYPE: Nucleic Acid
STRANDEDNESS: Single
TOPOLOGY: Linear
US-08-643-181-11

Query Match 68.0%; Score 6.8; DB 2; Length 20;
Best Local Similarity 66.7%; Pred. No. 3.9e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
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DB 10 GACCCGTCG 2

RESULT 100
US-08-470-426B-30
Sequence 30, Application US/08470426B
Patent No. 5856458
GENERAL INFORMATION:
APPLICANT: Okamoto, Hiroaki
APPLICANT: Nakamura, Tetsuo
TITLE OF INVENTION: OLIGONUCLEOTIDE PRIMERS, AND THEIR
APPLICATION FOR HIGH-FIDELITY DETECTION OF NON-A, NON-B
HEPATITIS VIRUS
NUMBER OF SEQUENCES: 33
CORRESPONDENCE ADDRESS:
ADDRESSEE: Beveridge, DeGrandi, Weilacher & Young,
ADDRESSEE: L.L.P.
STREET: 1850 M Street, N.W., Suite 800
CITY: Washington
STATE: DC
COUNTRY: USA
ZIP: 20036
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/470,426B
FILING DATE: 06-JUN-1995
CLASSIFICATION: 536
PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 2-153402
FILING DATE: 12-JUN-1990
ATTORNEY/AGENT INFORMATION:
NAME: Weilacher, Robert G.
REGISTRATION NUMBER: 20,531
REFERENCE/DOCKET NUMBER: 06/59-47083.1

TELECOMMUNICATION INFORMATION:
TELEPHONE: (202) 659-2811
TELEFAX: (202) 659-1462
INFORMATION FOR SEQ ID NO: 30:
SEQUENCE CHARACTERISTICS:
LENGTH: 20 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: unknown
MOLECULE TYPE: DNA (genomic)
US-08-470-426B-30

Query Match 68.0%; Score 6.8; DB 2; Length 20;
Best Local Similarity 66.7%; Pred. No. 3.9e+04;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANGKTCG 10
Db 10 GAGGGTCG 18

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Job time : 72.5 secs

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OM nucleic - nucleic search, using sw model

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(without alignments)
216.656 Million cell updates/sec

Title: US-10-033-243-62

Perfect score: 10

Sequence: 1 ndancgkctcg 10

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Minimum DB seq length: 0

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Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 100 summaries

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	6.8	68.0	10	14	US-10-033-243-62
2	6.8	68.0	10	14	US-10-033-243-62
3	6.8	68.0	10	14	US-10-033-243-62
4	6.8	68.0	10	14	US-10-033-243-62
5	6.8	68.0	10	14	US-10-033-243-62
6	6.8	68.0	10	14	US-10-033-243-62
7	6.8	68.0	10	14	US-10-033-243-62
8	6.8	68.0	10	14	US-10-033-243-62
9	6.8	68.0	10	14	US-10-033-243-62
10	6.8	68.0	10	14	US-10-033-243-62
11	6.8	68.0	10	14	US-10-033-243-62
12	6.8	68.0	10	14	US-10-033-243-62
13	6.8	68.0	10	14	US-10-033-243-62
14	6.8	68.0	10	14	US-10-033-243-62
15	6.8	68.0	10	14	US-10-033-243-62
16	6.8	68.0	10	14	US-10-033-243-62
17	6.8	68.0	10	14	US-10-033-243-62
18	6.8	68.0	10	14	US-10-033-243-62
19	6.8	68.0	10	14	US-10-033-243-62
20	6.8	68.0	10	14	US-10-033-243-62
21	6.8	68.0	10	14	US-10-033-243-62
22	6.8	68.0	10	14	US-10-033-243-62
23	6.8	68.0	10	14	US-10-033-243-62
24	6.8	68.0	10	14	US-10-033-243-62
25	6.8	68.0	10	14	US-10-033-243-62
26	6.8	68.0	10	14	US-10-033-243-62
27	6.8	68.0	10	14	US-10-033-243-62
28	6.8	68.0	10	14	US-10-033-243-62
29	6.8	68.0	10	14	US-10-033-243-62
30	6.8	68.0	10	14	US-10-033-243-62
31	6.8	68.0	10	14	US-10-033-243-62
32	6.8	68.0	10	14	US-10-033-243-62
33	6.8	68.0	10	14	US-10-033-243-62
34	6.8	68.0	10	14	US-10-033-243-62
35	6.8	68.0	10	14	US-10-033-243-62
36	6.8	68.0	10	14	US-10-033-243-62
37	6.8	68.0	10	14	US-10-033-243-62
38	6.8	68.0	10	14	US-10-033-243-62
39	6.8	68.0	10	14	US-10-033-243-62
40	6.8	68.0	10	14	US-10-033-243-62
41	6.8	68.0	10	14	US-10-033-243-62
42	6.8	68.0	10	14	US-10-033-243-62
43	6.8	68.0	10	14	US-10-033-243-62
44	6.8	68.0	10	14	US-10-033-243-62
45	6.8	68.0	10	14	US-10-033-243-62
46	6.8	68.0	10	14	US-10-033-243-62
47	6.8	68.0	10	14	US-10-033-243-62
48	6.8	68.0	10	14	US-10-033-243-62
49	6.8	68.0	10	14	US-10-033-243-62
50	6.8	68.0	10	14	US-10-033-243-62
51	6.8	68.0	10	14	US-10-033-243-62
52	6.8	68.0	10	14	US-10-033-243-62
53	6.8	68.0	10	14	US-10-033-243-62
54	6.8	68.0	10	14	US-10-033-243-62
55	6.8	68.0	10	14	US-10-033-243-62
56	6.8	68.0	10	14	US-10-033-243-62
57	6.8	68.0	10	14	US-10-033-243-62
58	6.8	68.0	10	14	US-10-033-243-62
59	6.8	68.0	10	14	US-10-033-243-62
60	6.8	68.0	10	14	US-10-033-243-62
61	6.8	68.0	10	14	US-10-033-243-62
62	6.8	68.0	10	14	US-10-033-243-62
63	6.8	68.0	10	14	US-10-033-243-62
64	6.8	68.0	10	14	US-10-033-243-62
65	6.8	68.0	10	14	US-10-033-243-62
66	6.8	68.0	10	14	US-10-033-243-62
67	6.8	68.0	10	14	US-10-033-243-62
68	6.8	68.0	10	14	US-10-033-243-62
69	6.8	68.0	10	14	US-10-033-243-62
70	6.8	68.0	10	14	US-10-033-243-62
71	6.8	68.0	10	14	US-10-033-243-62
72	6.8	68.0	10	14	US-10-033-243-62
73	6.8	68.0	10	14	US-10-033-243-62
74	6.8	68.0	10	14	US-10-033-243-62
75	6.8	68.0	10	14	US-10-033-243-62
76	6.8	68.0	10	14	US-10-033-243-62
77	6.8	68.0	10	14	US-10-033-243-62
78	6.8	68.0	10	14	US-10-033-243-62
79	6.8	68.0	10	14	US-10-033-243-62
80	6.8	68.0	10	14	US-10-033-243-62

Sequence 21, Appl
 Sequence 22, Appl
 Sequence 5, Appl
 Sequence 6, Appl
 Sequence 7, Appl
 Sequence 8, Appl
 Sequence 9, Appl
 Sequence 10, Appl
 Sequence 11, Appl
 Sequence 12, Appl
 Sequence 13, Appl
 Sequence 14, Appl
 Sequence 15, Appl
 Sequence 16, Appl
 Sequence 17, Appl
 Sequence 18, Appl
 Sequence 19, Appl
 Sequence 20, Appl

Query Match 68.0%; Score 6.8; DB 14; Length 10;
 Best Local Similarity 66.7%; Pred. No. 2.3e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
 QY 2 DANCCKTCG 10
 Db 2 GAACGTCG 10

ALIGNMENTS

RESULT 1
 US-10-033-243-62
 ; Sequence 62, Application US/10033243
 ; Publication No. US20030049266A1
 ; GENERAL INFORMATION:
 ; APPLICANT: FEARON, Karen L.
 ; APPLICANT: DINA, Dino
 ; TITLE OF INVENTION: IMMUNOMODULATORY POLYNUCLEOTIDES AND
 ; FILE REFERENCE: 377882001800
 ; CURRENT FILING DATE: 2002-04-03
 ; PRIOR APPLICATION NUMBER: 60/258,675
 ; PRIOR FILING DATE: 2000-12-27
 ; NUMBER OF SEQ ID NOS: 133
 ; SOFTWARE: FastSeq for Windows Version 4.0
 ; SEQ ID NO 62
 ; LENGTH: 10
 ; TYPE: DNA
 ; ORGANISM: Artificial Sequence
 ; FEATURE:
 ; OTHER INFORMATION: Polynucleotide containing CG

NAME/KEY: misc_feature
 LOCATION: 1
 OTHER INFORMATION: n= t, g, c, or 5-bromocytosine
 FEATURE:
 NAME/KEY: misc_feature
 LOCATION: 4
 OTHER INFORMATION: n= t or m
 US-10-033-243-62

Query Match 68.0%; Score 6.8; DB 14; Length 10;
 Best Local Similarity 100.0%; Pred. No. 2.3e+05;
 Matches 9; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
 Db 2 DANCCKTCG 10

RESULT 2
 US-10-033-243-63
 ; Sequence 63, Application US/10033243
 ; Publication No. US20030049266A1
 ; GENERAL INFORMATION:
 ; APPLICANT: FEARON, Karen L.
 ; APPLICANT: DINA, Dino

Query Match 68.0%; Score 6.8; DB 14; Length 10;
 Best Local Similarity 66.7%; Pred. No. 2.3e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
 QY 2 DANCCKTCG 10
 Db 2 GAACGTCG 10

Query Match 68.0%; Score 6.8; DB 14; Length 10;
 Best Local Similarity 66.7%; Pred. No. 2.3e+05;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
 Db 2 GAACGTCG 10

RESULT 4-
 US-10-033-243-67
 ; Sequence 67, Application US/10033243
 ; Publication No. US20030049266A1
 ; GENERAL INFORMATION:
 ; APPLICANT: FEARON, Karen L.
 ; APPLICANT: DINA, Dino
 ; TITLE OF INVENTION: IMMUNOMODULATORY POLYNUCLEOTIDES AND
 ; FILE REFERENCE: 377882001800
 ; CURRENT FILING DATE: 2002-04-03
 ; PRIOR APPLICATION NUMBER: 60/258,675
 ; PRIOR FILING DATE: 2000-12-27

; NUMBER OF SEQ ID NOS: 133
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 67
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Polynucleotide containing CG
US-10-033-243-67

Query Match 68.0%; Score 6.8; DB 14; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: |||: |||
Db 2 GAACGCTCG 10

RESULT 5
US-10-033-243-68
; Sequence 68, Application US/10033243
; Publication No. US20030049266A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.
; APPLICANT: DINA, Dino
; TITLE OF INVENTION: IMMUNOMODULATORY POLYNUCLEOTIDES AND
; TITLE OF INVENTION: METHODS OF USING THE SAME
; FILE REFERENCE: 377882001800
; CURRENT APPLICATION NUMBER: US/10/033,243
; CURRENT FILING DATE: 2002-04-03
; PRIOR APPLICATION NUMBER: 60/258,675
; PRIOR FILING DATE: 2000-12-27
; NUMBER OF SEQ ID NOS: 133
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 68
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Polynucleotide containing CG
US-10-033-243-68

Query Match 68.0%; Score 6.8; DB 14; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: |||: |||
Db 2 GAACGCTCG 10

RESULT 6
US-10-033-243-69
; Sequence 69, Application US/10033243
; Publication No. US20030049266A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.
; APPLICANT: DINA, Dino
; TITLE OF INVENTION: IMMUNOMODULATORY POLYNUCLEOTIDES AND
; TITLE OF INVENTION: METHODS OF USING THE SAME
; FILE REFERENCE: 377882001800
; CURRENT APPLICATION NUMBER: US/10/033,243
; CURRENT FILING DATE: 2002-04-03
; PRIOR APPLICATION NUMBER: 60/258,675
; PRIOR FILING DATE: 2000-12-27
; NUMBER OF SEQ ID NOS: 133
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 69
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Polynucleotide containing CG
US-10-033-243-69

; OTHER INFORMATION: Polynucleotide containing CG
US-10-033-243-69

Query Match 68.0%; Score 6.8; DB 14; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: |||: |||
Db 2 GATCGTTCG 10

RESULT 7
US-10-033-243-70
; Sequence 70, Application US/10033243
; Publication No. US20030049266A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.
; APPLICANT: DINA, Dino
; TITLE OF INVENTION: IMMUNOMODULATORY POLYNUCLEOTIDES AND
; TITLE OF INVENTION: METHODS OF USING THE SAME
; FILE REFERENCE: 377882001800
; CURRENT APPLICATION NUMBER: US/10/033,243
; CURRENT FILING DATE: 2002-04-03
; PRIOR APPLICATION NUMBER: 60/258,675
; PRIOR FILING DATE: 2000-12-27
; NUMBER OF SEQ ID NOS: 133
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 70
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Polynucleotide containing CG
US-10-033-243-70

Query Match 68.0%; Score 6.8; DB 14; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: |||: |||
Db 2 GATCGTTCG 10

RESULT 8
US-10-033-243-71
; Sequence 71, Application US/10033243
; Publication No. US20030049266A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.
; APPLICANT: DINA, Dino
; TITLE OF INVENTION: IMMUNOMODULATORY POLYNUCLEOTIDES AND
; TITLE OF INVENTION: METHODS OF USING THE SAME
; FILE REFERENCE: 377882001800
; CURRENT APPLICATION NUMBER: US/10/033,243
; CURRENT FILING DATE: 2002-04-03
; PRIOR APPLICATION NUMBER: 60/258,675
; PRIOR FILING DATE: 2000-12-27
; NUMBER OF SEQ ID NOS: 133
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 71
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Polynucleotide containing CG
US-10-033-243-71

Query Match 68.0%; Score 6.8; DB 14; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

```
QY      2 DANCCKTCG 10
Db      2 GAACGGTCG 10

RESULT 9
US-10-033-243-72
; Sequence 72, Application US/10033243
; Publication No. US20030049266A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.
; APPLICANT: DINA, Dino
; TITLE OF INVENTION: IMMUNOMODULATORY POLYNUCLEOTIDES AND
; FILE REFERENCE: 377882001800
; CURRENT APPLICATION NUMBER: US/10/033,243
; PRIOR FILING DATE: 2002-04-03
; PRIOR APPLICATION NUMBER: 60/258,675
; PRIOR FILING DATE: 2000-12-27
; NUMBER OF SEQ ID NOS: 133
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 72
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Polynucleotide containing CG
US-10-033-243-72
Query Match      68.0%; Score 6.8; DB 14; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY      2 DANCCKTCG 10
Db      2 TAACGGTCG 10

RESULT 10
US-10-033-243-73
; Sequence 73, Application US/10033243
; Publication No. US20030049266A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.
; APPLICANT: DINA, Dino
; TITLE OF INVENTION: IMMUNOMODULATORY POLYNUCLEOTIDES AND
; FILE REFERENCE: 377882001800
; CURRENT APPLICATION NUMBER: US/10/033,243
; PRIOR FILING DATE: 2002-04-03
; PRIOR APPLICATION NUMBER: 60/258,675
; PRIOR FILING DATE: 2000-12-27
; NUMBER OF SEQ ID NOS: 133
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 73
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Polynucleotide containing CG
US-10-033-243-73
Query Match      68.0%; Score 6.8; DB 14; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY      2 DANCCKTCG 10
Db      2 TAACGGTCG 10

RESULT 11
US-10-033-243-74
; Sequence 74, Application US/10033243
; Publication No. US20030049266A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.
; APPLICANT: DINA, Dino
; TITLE OF INVENTION: IMMUNOMODULATORY POLYNUCLEOTIDES AND
; FILE REFERENCE: 377882001800
; CURRENT APPLICATION NUMBER: US/10/033,243
; PRIOR FILING DATE: 2002-04-03
; PRIOR APPLICATION NUMBER: 60/258,675
; PRIOR FILING DATE: 2000-12-27
; NUMBER OF SEQ ID NOS: 133
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 74
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Polynucleotide containing CG
US-10-033-243-74
Query Match      68.0%; Score 6.8; DB 14; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY      2 DANCCKTCG 10
Db      2 TAACGGTCG 10

RESULT 12
US-10-033-243-75
; Sequence 75, Application US/10033243
; Publication No. US20030049266A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.
; APPLICANT: DINA, Dino
; TITLE OF INVENTION: IMMUNOMODULATORY POLYNUCLEOTIDES AND
; FILE REFERENCE: 377882001800
; CURRENT APPLICATION NUMBER: US/10/033,243
; PRIOR FILING DATE: 2002-04-03
; PRIOR APPLICATION NUMBER: 60/258,675
; PRIOR FILING DATE: 2000-12-27
; NUMBER OF SEQ ID NOS: 133
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 75
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Polynucleotide containing CG
US-10-033-243-75
Query Match      68.0%; Score 6.8; DB 14; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY      2 DANCCKTCG 10
Db      2 TAACGGTCG 10

RESULT 13
US-10-033-243-76
; Sequence 76, Application US/10033243
; Publication No. US20030049266A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.
; APPLICANT: DINA, Dino
; TITLE OF INVENTION: IMMUNOMODULATORY POLYNUCLEOTIDES AND
; FILE REFERENCE: 377882001800
; CURRENT APPLICATION NUMBER: US/10/033,243
; PRIOR FILING DATE: 2002-04-03
; PRIOR APPLICATION NUMBER: 60/258,675
; PRIOR FILING DATE: 2000-12-27
; NUMBER OF SEQ ID NOS: 133
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 76
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Polynucleotide containing CG
US-10-033-243-76
Query Match      68.0%; Score 6.8; DB 14; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY      2 DANCCKTCG 10
Db      2 TAACGGTCG 10
```

; FILE REFERENCE: 377882001800
; CURRENT APPLICATION NUMBER: US/10/033,243
; PRIOR FILING DATE: 2002-04-03
; PRIOR APPLICATION NUMBER: 60/258,675
; PRIOR FILING DATE: 2000-12-27
; NUMBER OF SEQ ID NOS: 133
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 76
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Polynucleotide containing CG
; NAME/KEY: misc_feature
; LOCATION: 1
; OTHER INFORMATION: n = 5-bromocytosine
US-10-033-243-76

Query Match 68.0%; Score 6.8; DB 14; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
Db 2 GACCGTTCG 10

RESULT 14

US-10-033-243-77
; Sequence 77, Application US/10033243
; Publication No. US20030049266A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.
; APPLICANT: DINA, Dino
; TITLE OF INVENTION: IMMUNOMODULATORY POLYNUCLEOTIDES AND
; FILE REFERENCE: 377882001800
; CURRENT APPLICATION NUMBER: US/10/033,243
; CURRENT FILING DATE: 2002-04-03
; PRIOR APPLICATION NUMBER: 60/258,675
; PRIOR FILING DATE: 2000-12-27
; NUMBER OF SEQ ID NOS: 133
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 77
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Polynucleotide containing CG
US-10-033-243-77

Query Match 68.0%; Score 6.8; DB 14; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
Db 2 GACCGTTCG 10

RESULT 15

US-10-033-243-77/c
; Sequence 77, Application US/10033243
; Publication No. US20030049266A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.
; APPLICANT: DINA, Dino
; TITLE OF INVENTION: IMMUNOMODULATORY POLYNUCLEOTIDES AND
; FILE REFERENCE: 377882001800
; CURRENT APPLICATION NUMBER: US/10/033,243
; CURRENT FILING DATE: 2002-04-03

; PRIOR APPLICATION NUMBER: 60/258,675
; PRIOR FILING DATE: 2000-12-27
; NUMBER OF SEQ ID NOS: 133
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 77
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Polynucleotide containing CG
US-10-033-243-77

Query Match 68.0%; Score 6.8; DB 14; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
Db 9 GACCGTTCG 1

RESULT 16

US-10-033-243-78
; Sequence 78, Application US/10033243
; Publication No. US20030049266A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.
; APPLICANT: DINA, Dino
; TITLE OF INVENTION: IMMUNOMODULATORY POLYNUCLEOTIDES AND
; FILE REFERENCE: 377882001800
; CURRENT APPLICATION NUMBER: US/10/033,243
; CURRENT FILING DATE: 2002-04-03
; PRIOR APPLICATION NUMBER: 60/258,675
; PRIOR FILING DATE: 2000-12-27
; NUMBER OF SEQ ID NOS: 133
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 78
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Polynucleotide containing CG
US-10-033-243-78

Query Match 68.0%; Score 6.8; DB 14; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
Db 2 GACCGTTCG 10

RESULT 17

US-10-033-243-78/c
; Sequence 78, Application US/10033243
; Publication No. US20030049266A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.
; APPLICANT: DINA, Dino
; TITLE OF INVENTION: IMMUNOMODULATORY POLYNUCLEOTIDES AND
; FILE REFERENCE: 377882001800
; CURRENT APPLICATION NUMBER: US/10/033,243
; CURRENT FILING DATE: 2002-04-03
; PRIOR APPLICATION NUMBER: 60/258,675
; PRIOR FILING DATE: 2000-12-27
; NUMBER OF SEQ ID NOS: 133
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 78
; LENGTH: 10
; TYPE: DNA

```
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Polynucleotide containing CG
US-10-033-243-78

Query Match      68.0%; Score 6.8; DB 14; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
Db 9 GAACGGTCG 1

RESULT 18
US-10-033-243-79
; Sequence 79, Application US/10033243
; Publication No. US20030049266A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.
; APPLICANT: DINA, Dino
; TITLE OF INVENTION: IMMUNOMODULATORY POLYNUCLEOTIDES AND
; FILE REFERENCE: 377882001800
; CURRENT APPLICATION NUMBER: US/10/033,243
; PRIOR FILING DATE: 2002-04-03
; PRIOR APPLICATION NUMBER: 60/258,675
; PRIOR FILING DATE: 2000-12-27
; NUMBER OF SEQ ID NOS: 133
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 79
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Polynucleotide containing CG
; NAME/KEY: misc_feature
; LOCATION: 1
; OTHER INFORMATION: n = 5-bromocytosine
US-10-033-243-79

Query Match      68.0%; Score 6.8; DB 14; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
Db 9 GAACGGTCG 10

RESULT 19
US-10-033-243-80
; Sequence 80, Application US/10033243
; Publication No. US20030049266A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.
; APPLICANT: DINA, Dino
; TITLE OF INVENTION: IMMUNOMODULATORY POLYNUCLEOTIDES AND
; FILE REFERENCE: 377882001800
; CURRENT APPLICATION NUMBER: US/10/033,243
; PRIOR FILING DATE: 2002-04-03
; PRIOR APPLICATION NUMBER: 60/258,675
; PRIOR FILING DATE: 2000-12-27
; NUMBER OF SEQ ID NOS: 133
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 80
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Polynucleotide containing CG
US-10-033-243-80

Query Match      68.0%; Score 6.8; DB 14; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
Db 9 GAACGGTCG 10

RESULT 20
US-10-033-243-81
; Sequence 81, Application US/10033243
; Publication No. US20030049266A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.
; APPLICANT: DINA, Dino
; TITLE OF INVENTION: IMMUNOMODULATORY POLYNUCLEOTIDES AND
; FILE REFERENCE: 377882001800
; CURRENT APPLICATION NUMBER: US/10/033,243
; PRIOR FILING DATE: 2002-04-03
; PRIOR APPLICATION NUMBER: 60/258,675
; PRIOR FILING DATE: 2000-12-27
; NUMBER OF SEQ ID NOS: 133
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 81
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Polynucleotide containing CG
US-10-033-243-81

Query Match      68.0%; Score 6.8; DB 14; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
Db 9 GAACGGTCG 10

RESULT 21
US-10-033-243-82
; Sequence 82, Application US/10033243
; Publication No. US20030049266A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.
; APPLICANT: DINA, Dino
; TITLE OF INVENTION: IMMUNOMODULATORY POLYNUCLEOTIDES AND
; FILE REFERENCE: 377882001800
; CURRENT APPLICATION NUMBER: US/10/033,243
; PRIOR FILING DATE: 2002-04-03
; PRIOR APPLICATION NUMBER: 60/258,675
; PRIOR FILING DATE: 2000-12-27
; NUMBER OF SEQ ID NOS: 133
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 82
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Polynucleotide containing CG
US-10-033-243-82

Query Match      68.0%; Score 6.8; DB 14; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
Db 9 GAACGGTCG 10
```

Query Match 68.0%; Score 6.8; DB 16; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;

Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: |||: |||
Db 2 GATCGTTCG 10

RESULT 26
US-10-176-883-8
; Sequence 8, Application US/10176883
; Publication No. US20030175731A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE REFERENCE: 377882002000
; CURRENT APPLICATION NUMBER: US/10/176,883
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 8
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-176-883-8

Query Match 68.0%; Score 6.8; DB 16; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: |||: |||
Db 2 GATCGTTCG 10

RESULT 27
US-10-176-883-9
; Sequence 9, Application US/10176883
; Publication No. US20030175731A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE REFERENCE: 377882002000
; CURRENT APPLICATION NUMBER: US/10/176,883
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 9
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-176-883-9

Query Match 68.0%; Score 6.8; DB 16; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: |||: |||
Db 2 GATCGTTCG 10

RESULT 28
US-10-176-883-10
; Sequence 10, Application US/10176883
; Publication No. US20030175731A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE REFERENCE: 377882002000
; CURRENT APPLICATION NUMBER: US/10/176,883
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 10
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-176-883-10

Query Match 68.0%; Score 6.8; DB 16; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: |||: |||
Db 2 GATCGTTCG 10

RESULT 29
US-10-176-883-11
; Sequence 11, Application US/10176883
; Publication No. US20030175731A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE REFERENCE: 377882002000
; CURRENT APPLICATION NUMBER: US/10/176,883
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 11
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-176-883-11

Query Match 68.0%; Score 6.8; DB 16; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: ||: |||
Db 2 GAACGTCG 10

RESULT 30
US-10-176-883-12
; Sequence 12, Application US/10176883
; Publication No. US20030175731A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE OF INVENTION: METHODS OF USING THE SAME-I
; FILE REFERENCE: 377882002000
; CURRENT APPLICATION NUMBER: US/10/176,883
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 12
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-176-883-12

Query Match 68.0%; Score 6.8; DB 16; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: ||: |||
Db 2 TAACGTCG 10

RESULT 31
US-10-176-883-13
; Sequence 13, Application US/10176883
; Publication No. US20030175731A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE OF INVENTION: METHODS OF USING THE SAME-I
; FILE REFERENCE: 377882002000
; CURRENT APPLICATION NUMBER: US/10/176,883
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 13
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-176-883-13

Query Match 68.0%; Score 6.8; DB 16; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10

Db : ||: |||
2 TATCGTCG 10

RESULT 32
US-10-176-883-14
; Sequence 14, Application US/10176883
; Publication No. US20030175731A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE OF INVENTION: METHODS OF USING THE SAME-I
; FILE REFERENCE: 377882002000
; CURRENT APPLICATION NUMBER: US/10/176,883
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 14
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-176-883-14

Query Match 68.0%; Score 6.8; DB 16; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: ||: |||
Db 2 TACCGTCG 10

RESULT 33
US-10-176-883-15
; Sequence 15, Application US/10176883
; Publication No. US20030175731A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE OF INVENTION: METHODS OF USING THE SAME-I
; FILE REFERENCE: 377882002000
; CURRENT APPLICATION NUMBER: US/10/176,883
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 15
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-176-883-15

Query Match 68.0%; Score 6.8; DB 16; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: ||: |||

```
Db      2 AACCGTTCG 10

RESULT 34
US-10-176-883-16
; Sequence 16, Application US/10176883
; Publication No. US20030175731A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE OF INVENTION: METHODS OF USING THE SAME-I
; FILE REFERENCE: 377882002000
; CURRENT APPLICATION NUMBER: US/10/176,883
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 16
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
; NAME/KEY: variation
; LOCATION: 1
; OTHER INFORMATION: n = 5-bromocytosine
US-10-176-883-16

Query Match      68.0%; Score 6.8; DB 16; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY      2 DANGKTCG 10
       :|||:|
Db      2 GACCGTTCG 10

RESULT 35
US-10-176-883-17
; Sequence 17, Application US/10176883
; Publication No. US20030175731A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE OF INVENTION: METHODS OF USING THE SAME-I
; FILE REFERENCE: 377882002000
; CURRENT APPLICATION NUMBER: US/10/176,883
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 17
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-176-883-17

Query Match      68.0%; Score 6.8; DB 16; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY      2 DANGKTCG 10
       :|||:|
Db      2 GACCGTTCG 10

RESULT 36
US-10-176-883-17/c
; Sequence 17, Application US/10176883
; Publication No. US20030175731A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE OF INVENTION: METHODS OF USING THE SAME-I
; FILE REFERENCE: 377882002000
; CURRENT APPLICATION NUMBER: US/10/176,883
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 17
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-176-883-17

Query Match      68.0%; Score 6.8; DB 16; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY      2 DANGKTCG 10
       :|||:|
Db      2 GACCGTTCG 10

RESULT 37
US-10-176-883-18
; Sequence 18, Application US/10176883
; Publication No. US20030175731A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE OF INVENTION: METHODS OF USING THE SAME-I
; FILE REFERENCE: 377882002000
; CURRENT APPLICATION NUMBER: US/10/176,883
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 18
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-176-883-18

Query Match      68.0%; Score 6.8; DB 16; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
```

```
QY 2 DANCCKTCG 10
Db 2 GACGGTTCG 10

Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
Db 2 GACGGTTCG 10

RESULT 38
US-10-176-883-18/c
; Sequence 18, Application US/10176883
; Publication No. US20030175731A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-I
; FILE REFERENCE: 377882002000
; CURRENT APPLICATION NUMBER: US/10/176,883
; CURRENT FILING DATE: 2002-06-21
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 18
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-176-883-18

Query Match 68.0%; Score 6.8; DB 16; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
Db 9 GACGGTTCG 1

RESULT 39
US-10-176-883-19
; Sequence 19, Application US/10176883
; Publication No. US20030175731A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-I
; FILE REFERENCE: 377882002000
; CURRENT APPLICATION NUMBER: US/10/176,883
; CURRENT FILING DATE: 2002-06-21
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 19
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
; FEATURE:
; NAME/KEY: variation
; LOCATION: 1
; OTHER INFORMATION: n = 5-bromocytosine
US-10-176-883-19

Query Match 68.0%; Score 6.8; DB 16; Length 10;

Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
Db 2 GACGGTTCG 10

RESULT 40
US-10-176-883-20
; Sequence 20, Application US/10176883
; Publication No. US20030175731A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-I
; FILE REFERENCE: 377882002000
; CURRENT APPLICATION NUMBER: US/10/176,883
; CURRENT FILING DATE: 2002-06-21
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 20
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-176-883-20

Query Match 68.0%; Score 6.8; DB 16; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
Db 2 TAACGUTCG 10

RESULT 41
US-10-176-883-21
; Sequence 21, Application US/10176883
; Publication No. US20030175731A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-I
; FILE REFERENCE: 377882002000
; CURRENT APPLICATION NUMBER: US/10/176,883
; CURRENT FILING DATE: 2002-06-21
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 21
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-176-883-21

Query Match 68.0%; Score 6.8; DB 16; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
```

Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANGKTCG 10
:| ||:|
Db 2 UAACGTCG 10

RESULT 42

US-10-176-883-22
; Sequence 22, Application US/10176883
; Publication No. US20030175731A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE REFERENCE: 377882002000
; CURRENT APPLICATION NUMBER: US/10/176,883
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 22
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-176-883-22

Query Match 68.0%; Score 6.8; DB 16; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANGKTCG 10
:| ||:|
Db 2 TAACGTCG 10

RESULT 43

US-10-177-826-5
; Sequence 5, Application US/10177826
; Publication No. US20030199466A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE REFERENCE: 377882002001
; CURRENT APPLICATION NUMBER: US/10/177,826
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 5
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-177-826-5

Query Match 68.0%; Score 6.8; DB 16; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANGKTCG 10
:| ||:|
Db 2 GAACGTCG 10

RESULT 44

US-10-177-826-6
; Sequence 6, Application US/10177826
; Publication No. US20030199466A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE REFERENCE: 377882002001
; CURRENT APPLICATION NUMBER: US/10/177,826
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 6
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-177-826-6

Query Match 68.0%; Score 6.8; DB 16; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANGKTCG 10
:| ||:|
Db 2 GAACGTCG 10

RESULT 45

US-10-177-826-7
; Sequence 7, Application US/10177826
; Publication No. US20030199466A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE REFERENCE: 377882002001
; CURRENT APPLICATION NUMBER: US/10/177,826
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 7
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-177-826-7

Query Match 68.0%; Score 6.8; DB 16; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: ||: |||
Db 2 GACGCTCG 10

RESULT 46
US-10-177-826-8
; Sequence 8, Application US/10177826
; Publication No. US20030199466A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE OF INVENTION: METHODS OF USING THE SAME-II
; FILE REFERENCE: 377882002001
; CURRENT APPLICATION NUMBER: US/10/177,826
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 8
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-177-826-8

Query Match 68.0%; Score 6.8; DB 16; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: ||: |||
Db 2 GACGCTCG 10

RESULT 47
US-10-177-826-9
; Sequence 9, Application US/10177826
; Publication No. US20030199466A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE OF INVENTION: METHODS OF USING THE SAME-II
; FILE REFERENCE: 377882002001
; CURRENT APPLICATION NUMBER: US/10/177,826
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 9
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-177-826-9

Query Match 68.0%; Score 6.8; DB 16; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10

Db 2 GATCGTTCG 10
: ||: |||

RESULT 48
US-10-177-826-10
; Sequence 10, Application US/10177826
; Publication No. US20030199466A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE OF INVENTION: METHODS OF USING THE SAME-II
; FILE REFERENCE: 377882002001
; CURRENT APPLICATION NUMBER: US/10/177,826
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 10
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-177-826-10

Query Match 68.0%; Score 6.8; DB 16; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: ||: |||
Db 2 GATCGTTCG 10

RESULT 49
US-10-177-826-11
; Sequence 11, Application US/10177826
; Publication No. US20030199466A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE OF INVENTION: METHODS OF USING THE SAME-II
; FILE REFERENCE: 377882002001
; CURRENT APPLICATION NUMBER: US/10/177,826
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 11
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-177-826-11

Query Match 68.0%; Score 6.8; DB 16; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: ||: |||

Db 2 GAACGTCG 10

```
RESULT 50
US-10-177-826-12
; Sequence 12, Application US/10177826
; Publication No. US20030199466A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-II
; FILE REFERENCE: 377882002001
; CURRENT APPLICATION NUMBER: US/10/177,826
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 12
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-177-826-12
```

Query Match 68.0%; Score 6.8; DB 16; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGRKTCG 10
: |||:|
Db 2 TAACGTTTCG 10

```
RESULT 51
US-10-177-826-13
; Sequence 13, Application US/10177826
; Publication No. US20030199466A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-II
; FILE REFERENCE: 377882002001
; CURRENT APPLICATION NUMBER: US/10/177,826
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 13
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-177-826-13
```

Query Match 68.0%; Score 6.8; DB 16; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGRKTCG 10
: |||:|
Db 2 TATCGGTCG 10

```
RESULT 52
US-10-177-826-14
; Sequence 14, Application US/10177826
; Publication No. US20030199466A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-II
; FILE REFERENCE: 377882002001
; CURRENT APPLICATION NUMBER: US/10/177,826
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 14
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-177-826-14
```

Query Match 68.0%; Score 6.8; DB 16; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGRKTCG 10
: |||:|
Db 2 TACCGTTTCG 10

```
RESULT 53
US-10-177-826-15
; Sequence 15, Application US/10177826
; Publication No. US20030199466A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-II
; FILE REFERENCE: 377882002001
; CURRENT APPLICATION NUMBER: US/10/177,826
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 15
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-177-826-15
```

Query Match 68.0%; Score 6.8; DB 16; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGRKTCG 10
: |||:|
Db 2 AACCGTTTCG 10

```

RESULT 54
US-10-177-826-16
; Sequence 16, Application US/10177826
; Publication No. US20030199466A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-II
; FILE REFERENCE: 377882002001
; CURRENT APPLICATION NUMBER: US/10/177,826
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 16
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
; NAME/KEY: variation
; LOCATION: 1
; OTHER INFORMATION: n = 5-bromocytosine
;
US-10-177-826-16
Query Match 68.0%; Score 6.8; DB 16; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGRKTCG 10
Db 2 GACCGTTCG 10

RESULT 55
US-10-177-826-17
; Sequence 17, Application US/10177826
; Publication No. US20030199466A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-II
; FILE REFERENCE: 377882002001
; CURRENT APPLICATION NUMBER: US/10/177,826
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 17
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
;
US-10-177-826-17
Query Match 68.0%; Score 6.8; DB 16; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGRKTCG 10
Db 2 GACCGTTCG 10

RESULT 56
US-10-177-826-17/c
; Sequence 17, Application US/10177826
; Publication No. US20030199466A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-II
; FILE REFERENCE: 377882002001
; CURRENT APPLICATION NUMBER: US/10/177,826
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 17
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
;
US-10-177-826-17
Query Match 68.0%; Score 6.8; DB 16; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGRKTCG 10
Db 9 GACCGTTCG 1

RESULT 57
US-10-177-826-18
; Sequence 18, Application US/10177826
; Publication No. US20030199466A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-II
; FILE REFERENCE: 377882002001
; CURRENT APPLICATION NUMBER: US/10/177,826
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 18
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
;
US-10-177-826-18
Query Match 68.0%; Score 6.8; DB 16; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGRKTCG 10
Db 9 GACCGTTCG 1

RESULT 58
US-10-177-826-19
; Sequence 19, Application US/10177826
; Publication No. US20030199466A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-II
; FILE REFERENCE: 377882002001
; CURRENT APPLICATION NUMBER: US/10/177,826
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 19
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
;
US-10-177-826-19
Query Match 68.0%; Score 6.8; DB 16; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGRKTCG 10
Db 9 GACCGTTCG 1
```

Db 2 GACCGTTCG 10

RESULT 58
US-10-177-826-18/c
; Sequence 18, Application US/10177826
; Publication No. US20030199466A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE REFERENCE: 377882002001
; CURRENT APPLICATION NUMBER: US/10/177,826
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 18
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-177-826-18

Query Match 68.0%; Score 6.8; DB 16; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: |||||
Db 9 GACCGTTCG 1

RESULT 59
US-10-177-826-19
; Sequence 19, Application US/10177826
; Publication No. US20030199466A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE REFERENCE: 377882002001
; CURRENT APPLICATION NUMBER: US/10/177,826
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 19
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
; NAME/KEY: variation
; LOCATION: 1
; OTHER INFORMATION: n = 5-bromocytosine
US-10-177-826-19

Query Match 68.0%; Score 6.8; DB 16; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: |||||
Db 2 GACCGTTCG 10

RESULT 60
US-10-177-826-20
; Sequence 20, Application US/10177826
; Publication No. US20030199466A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE REFERENCE: 377882002001
; CURRENT APPLICATION NUMBER: US/10/177,826
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 20
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-177-826-20

Query Match 68.0%; Score 6.8; DB 16; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: |||||
Db 2 TAACGGTTCG 10

RESULT 61
US-10-177-826-21
; Sequence 21, Application US/10177826
; Publication No. US20030199466A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE REFERENCE: 377882002001
; CURRENT APPLICATION NUMBER: US/10/177,826
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 21
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-177-826-21

Query Match 68.0%; Score 6.8; DB 16; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

```
QY      2 DANCCKTCG 10
Db      2 UAACGTCG 10

RESULT 62
US-10-177-826-22
; Sequence 22, Application US/10177826
; Publication No. US20030199466A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE REFERENCE: 377882002001
; CURRENT APPLICATION NUMBER: US/10/177,826
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 22
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-177-826-22

Query Match      68.0%; Score 6.8; DB 16; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY      2 DANCCKTCG 10
Db      2 UAACGTCG 10

RESULT 63
US-10-328-578-5
; Sequence 5, Application US/10328578
; Publication No. US20030225016A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE REFERENCE: 377882002020
; CURRENT APPLICATION NUMBER: US/10/328,578
; CURRENT FILING DATE: 2003-05-16
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/375,253
; PRIOR FILING DATE: 2002-04-23
; PRIOR APPLICATION NUMBER: US 10/177,826
; NUMBER OF SEQ ID NOS: 152
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 5
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-328-578-5

Query Match      68.0%; Score 6.8; DB 17; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY      2 DANCCKTCG 10
Db      2 UAACGTCG 10

RESULT 64
US-10-328-578-6
; Sequence 6, Application US/10328578
; Publication No. US20030225016A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE REFERENCE: 377882002020
; CURRENT APPLICATION NUMBER: US/10/328,578
; CURRENT FILING DATE: 2003-05-16
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/375,253
; PRIOR FILING DATE: 2002-04-23
; PRIOR APPLICATION NUMBER: US 10/177,826
; NUMBER OF SEQ ID NOS: 152
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 6
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-328-578-6

Query Match      68.0%; Score 6.8; DB 17; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY      2 DANCCKTCG 10
Db      2 UAACGTCG 10

RESULT 65
US-10-328-578-7
; Sequence 7, Application US/10328578
; Publication No. US20030225016A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE REFERENCE: 377882002020
; CURRENT APPLICATION NUMBER: US/10/328,578
; CURRENT FILING DATE: 2003-05-16
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/375,253
; PRIOR FILING DATE: 2002-04-23
; PRIOR APPLICATION NUMBER: US 10/177,826
; NUMBER OF SEQ ID NOS: 152
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 7
; LENGTH: 10
```

```
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-328-578-7

Query Match      68.0%; Score 6.8; DB 17; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY      2 DANCCKTCG 10
Db      2 GACCGTTCG 10

RESULT 66
US-10-328-578-8
; Sequence 8, Application US/10328578
; Publication No. US20030225016A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE REFERENCE: 377882002020
; CURRENT APPLICATION NUMBER: US/10/328,578
; CURRENT FILING DATE: 2003-05-16
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/375,253
; PRIOR FILING DATE: 2002-04-23
; PRIOR APPLICATION NUMBER: US 10/177,826
; PRIOR FILING DATE: 2002-06-21
; NUMBER OF SEQ ID NOS: 152
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 8
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-328-578-8

Query Match      68.0%; Score 6.8; DB 17; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY      2 DANCCKTCG 10
Db      2 GACCGTTCG 10

RESULT 67
US-10-328-578-9
; Sequence 9, Application US/10328578
; Publication No. US20030225016A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE REFERENCE: 377882002020
; CURRENT APPLICATION NUMBER: US/10/328,578
; CURRENT FILING DATE: 2003-05-16
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/375,253
```

```
; PRIOR FILING DATE: 2002-04-23
; PRIOR APPLICATION NUMBER: US 10/177,826
; PRIOR FILING DATE: 2002-06-21
; NUMBER OF SEQ ID NOS: 152
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 9
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-328-578-9

Query Match      68.0%; Score 6.8; DB 17; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY      2 DANCCKTCG 10
Db      2 GATCGGTCG 10

RESULT 68
US-10-328-578-10
; Sequence 10, Application US/10328578
; Publication No. US20030225016A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE REFERENCE: 377882002020
; CURRENT APPLICATION NUMBER: US/10/328,578
; CURRENT FILING DATE: 2003-05-16
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/375,253
; PRIOR FILING DATE: 2002-04-23
; PRIOR APPLICATION NUMBER: US 10/177,826
; PRIOR FILING DATE: 2002-06-21
; NUMBER OF SEQ ID NOS: 152
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 10
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-328-578-10

Query Match      68.0%; Score 6.8; DB 17; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY      2 DANCCKTCG 10
Db      2 GATCGGTCG 10

RESULT 69
US-10-328-578-11
; Sequence 11, Application US/10328578
; Publication No. US20030225016A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE REFERENCE: 377882002020
```

; CURRENT APPLICATION NUMBER: US/10/328,578
; CURRENT FILING DATE: 2003-05-16
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/375,253
; PRIOR FILING DATE: 2002-04-23
; PRIOR APPLICATION NUMBER: US 10/177,826
; PRIOR FILING DATE: 2002-06-21
; NUMBER OF SEQ ID NOS: 152
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 11
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-328-578-11

Query Match 68.0%; Score 6.8; DB 17; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: || ||: |||
DB 2 GAACGGTCG 10

RESULT 70
US-10-328-578-12
; Sequence 12, Application US/10328578
; Publication No. US20030225016A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE REFERENCE: 3778820020
; CURRENT APPLICATION NUMBER: US/10/328,578
; CURRENT FILING DATE: 2003-05-16
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/375,253
; PRIOR FILING DATE: 2002-04-23
; PRIOR APPLICATION NUMBER: US 10/177,826
; PRIOR FILING DATE: 2002-06-21
; NUMBER OF SEQ ID NOS: 152
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 12
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-328-578-12

Query Match 68.0%; Score 6.8; DB 17; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: || ||: |||
DB 2 TAACGGTCG 10

RESULT 71
US-10-328-578-13
; Sequence 13, Application US/10328578
; Publication No. US20030225016A1

; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE REFERENCE: 3778820020
; CURRENT APPLICATION NUMBER: US/10/328,578
; CURRENT FILING DATE: 2003-05-16
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/375,253
; PRIOR FILING DATE: 2002-04-23
; PRIOR APPLICATION NUMBER: US 10/177,826
; PRIOR FILING DATE: 2002-06-21
; NUMBER OF SEQ ID NOS: 152
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 13
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-328-578-13

Query Match 68.0%; Score 6.8; DB 17; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: || ||: |||
DB 2 TATCGGTCG 10

RESULT 72
US-10-328-578-14
; Sequence 14, Application US/10328578
; Publication No. US20030225016A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE REFERENCE: 3778820020
; CURRENT APPLICATION NUMBER: US/10/328,578
; CURRENT FILING DATE: 2003-05-16
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/375,253
; PRIOR FILING DATE: 2002-04-23
; PRIOR APPLICATION NUMBER: US 10/177,826
; PRIOR FILING DATE: 2002-06-21
; NUMBER OF SEQ ID NOS: 152
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 14
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-328-578-14

Query Match 68.0%; Score 6.8; DB 17; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: || ||: |||

```
Db      2  TACCGTTCG 10

RESULT 73
US-10-328-578-15
; Sequence 15, Application US/10328578
; Publication No. US20030225016A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-II-
; FILE REFERENCE: 377882002020
; CURRENT APPLICATION NUMBER: US/10/328,578
; CURRENT FILING DATE: 2003-05-16
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/375,253
; PRIOR FILING DATE: 2002-04-23
; PRIOR APPLICATION NUMBER: US 10/177,826
; PRIOR FILING DATE: 2002-06-21
; NUMBER OF SEQ ID NOS: 152
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 15
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-328-578-15

Query Match      68.0%; Score 6.8; DB 17; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY      2  DANCCKTCG 10
       : |||||
Db      2  GACCGTTCG 10

RESULT 74
US-10-328-578-16
; Sequence 16, Application US/10328578
; Publication No. US20030225016A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-III
; FILE REFERENCE: 377882002020
; CURRENT APPLICATION NUMBER: US/10/328,578
; CURRENT FILING DATE: 2003-05-16
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/375,253
; PRIOR FILING DATE: 2002-04-23
; PRIOR APPLICATION NUMBER: US 10/177,826
; PRIOR FILING DATE: 2002-06-21
; NUMBER OF SEQ ID NOS: 152
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 16
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-328-578-16

Query Match      68.0%; Score 6.8; DB 17; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY      2  DANCCKTCG 10
       : |||||
Db      2  AACCGTTCG 10

RESULT 75
US-10-328-578-17
; Sequence 17, Application US/10328578
; Publication No. US20030225016A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-III
; FILE REFERENCE: 377882002020
; CURRENT APPLICATION NUMBER: US/10/328,578
; CURRENT FILING DATE: 2003-05-16
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/375,253
; PRIOR FILING DATE: 2002-04-23
; PRIOR APPLICATION NUMBER: US 10/177,826
; PRIOR FILING DATE: 2002-06-21
; NUMBER OF SEQ ID NOS: 152
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 17
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-328-578-17

Query Match      68.0%; Score 6.8; DB 17; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY      2  DANCCKTCG 10
       : |||||
Db      2  GACCGTTCG 10

RESULT 76
US-10-328-578-17/c
; Sequence 17, Application US/10328578
; Publication No. US20030225016A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-III
; FILE REFERENCE: 377882002020
; CURRENT APPLICATION NUMBER: US/10/328,578
; CURRENT FILING DATE: 2003-05-16
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/375,253
; PRIOR FILING DATE: 2002-04-23
; PRIOR APPLICATION NUMBER: US 10/177,826
; PRIOR FILING DATE: 2002-06-21
; NUMBER OF SEQ ID NOS: 152
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 16
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-328-578-17/c

Query Match      68.0%; Score 6.8; DB 17; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY      2  DANCCKTCG 10
       : |||||
Db      2  GACCGTTCG 10
```

```
; PRIOR APPLICATION NUMBER: US 10/177,826
; PRIOR FILING DATE: 2002-06-21
; NUMBER OF SEQ ID NOS: 152
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 17
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-328-578-17

Query Match      68.0%; Score 6.8; DB 17; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY      2 DANCCKTCG 10
       :|||:|
Db      9 GAACGTCG 1

RESULT 77
US-10-328-578-18
; Sequence 18, Application US/10328578
; Publication No. US20030225016A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-III
; FILE REFERENCE: 377882002020
; CURRENT APPLICATION NUMBER: US/10/328,578
; CURRENT FILING DATE: 2003-05-16
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/375,253
; PRIOR FILING DATE: 2002-04-23
; PRIOR APPLICATION NUMBER: US 10/177,826
; PRIOR FILING DATE: 2002-06-21
; NUMBER OF SEQ ID NOS: 152
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 18
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-328-578-18

Query Match      68.0%; Score 6.8; DB 17; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY      2 DANCCKTCG 10
       :|||:|
Db      9 GAACGTCG 1

RESULT 78
US-10-328-578-18/c
; Sequence 18, Application US/10328578
; Publication No. US20030225016A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-III
; FILE REFERENCE: 377882002020
; CURRENT APPLICATION NUMBER: US/10/328,578
```

```
; CURRENT FILING DATE: 2003-05-16
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/375,253
; PRIOR FILING DATE: 2002-04-23
; PRIOR APPLICATION NUMBER: US 10/177,826
; PRIOR FILING DATE: 2002-06-21
; NUMBER OF SEQ ID NOS: 152
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 18
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-328-578-18

Query Match      68.0%; Score 6.8; DB 17; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY      2 DANCCKTCG 10
       :|||:|
Db      9 GAACGTCG 1

RESULT 79
US-10-328-578-19
; Sequence 19, Application US/10328578
; Publication No. US20030225016A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-III
; FILE REFERENCE: 377882002020
; CURRENT APPLICATION NUMBER: US/10/328,578
; CURRENT FILING DATE: 2003-05-16
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/375,253
; PRIOR FILING DATE: 2002-04-23
; PRIOR APPLICATION NUMBER: US 10/177,826
; PRIOR FILING DATE: 2002-06-21
; NUMBER OF SEQ ID NOS: 152
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 19
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-328-578-19

Query Match      68.0%; Score 6.8; DB 17; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY      2 DANCCKTCG 10
       :|||:|
Db      2 GAACGTCG 10

RESULT 80
```

US-10-328-578-20
; Sequence 20, Application US/10328578
; Publication No. US20030225016A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-III
; FILE REFERENCE: 377882002020
; CURRENT APPLICATION NUMBER: US/10/328,578
; CURRENT FILING DATE: 2003-05-16
; PRIOR FILING DATE: 2002-06-21
; PRIOR FILING DATE: 2002-06-21
; PRIOR FILING DATE: 2001-06-21
; PRIOR FILING DATE: 2002-04-23
; PRIOR FILING DATE: 2002-04-23
; PRIOR FILING DATE: 2002-06-21
; NUMBER OF SEQ ID NOS: 152
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 20
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-328-578-20

Query Match 68.0%; Score 6.8; DB 17; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: |||||
Db 2 TAACGTCG 10

RESULT 81
US-10-328-578-21
; Sequence 21, Application US/10328578
; Publication No. US20030225016A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-III
; FILE REFERENCE: 377882002020
; CURRENT APPLICATION NUMBER: US/10/328,578
; CURRENT FILING DATE: 2003-05-16
; PRIOR FILING DATE: 2002-06-21
; PRIOR FILING DATE: 2002-06-21
; PRIOR FILING DATE: 2001-06-21
; PRIOR FILING DATE: 2002-04-23
; PRIOR FILING DATE: 2002-04-23
; PRIOR FILING DATE: 2002-06-21
; NUMBER OF SEQ ID NOS: 152
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 21
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-328-578-21

Query Match 68.0%; Score 6.8; DB 17; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: |||||
Db 2 UAACGTCG 10

RESULT 82
US-10-328-578-22
; Sequence 22, Application US/10328578
; Publication No. US20030225016A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-III
; FILE REFERENCE: 377882002020
; CURRENT APPLICATION NUMBER: US/10/328,578
; CURRENT FILING DATE: 2003-05-16
; PRIOR FILING DATE: 2002-06-21
; PRIOR FILING DATE: 2002-06-21
; PRIOR FILING DATE: 2001-06-21
; PRIOR FILING DATE: 2002-04-23
; PRIOR FILING DATE: 2002-04-23
; PRIOR FILING DATE: 2002-06-21
; NUMBER OF SEQ ID NOS: 152
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 22
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-328-578-22

Query Match 68.0%; Score 6.8; DB 17; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
: |||||
Db 2 TAACGTCG 10

RESULT 83
US-10-623-371-5
; Sequence 5, Application US/10623371
; Publication No. US20040132677A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; APPLICANT: Tuck, Stephen F.
; APPLICANT: Dina, Dino
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-IV
; FILE REFERENCE: 377882002021
; CURRENT APPLICATION NUMBER: US/10/623,371
; CURRENT FILING DATE: 2003-07-18
; PRIOR FILING DATE: 2003-07-18
; PRIOR FILING DATE: 2002-12-23
; PRIOR FILING DATE: 2002-12-23
; PRIOR FILING DATE: 2002-12-23
; PRIOR FILING DATE: 2002-06-21
; PRIOR FILING DATE: 2002-06-21
; PRIOR FILING DATE: 2002-06-21
; PRIOR FILING DATE: 2001-06-21
; PRIOR FILING DATE: 2001-06-21
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 158
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 5
; LENGTH: 10

```
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-623-371-5

Query Match      68.0%; Score 6.8; DB 19; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
   :|:|:|:|
Db 2 GAACGTCG 10

RESULT 84
US-10-623-371-6
; Sequence 6, Application US/10623371
; Publication No. US20040132677A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.
; APPLICANT: DINA, Dino
; APPLICANT: TUCK, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE REFERENCE: 377882002021
; CURRENT APPLICATION NUMBER: US/10/623,371
; CURRENT FILING DATE: 2003-07-18
; PRIOR APPLICATION NUMBER: US 10/328,578
; PRIOR FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 10/177,826
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 158
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 6
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-623-371-6

Query Match      68.0%; Score 6.8; DB 19; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
   :|:|:|:|
Db 2 GAACGTCG 10

RESULT 85
US-10-623-371-7
; Sequence 7, Application US/10623371
; Publication No. US20040132677A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.
; APPLICANT: DINA, Dino
; APPLICANT: TUCK, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE REFERENCE: 377882002021
; CURRENT APPLICATION NUMBER: US/10/623,371
; CURRENT FILING DATE: 2003-07-18
; PRIOR APPLICATION NUMBER: US 10/328,578
; PRIOR FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 158
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 7
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-623-371-7

Query Match      68.0%; Score 6.8; DB 19; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
   :|:|:|:|
Db 2 GAACGTCG 10

RESULT 86
US-10-623-371-8
; Sequence 8, Application US/10623371
; Publication No. US20040132677A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.
; APPLICANT: DINA, Dino
; APPLICANT: TUCK, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE REFERENCE: 377882002021
; CURRENT APPLICATION NUMBER: US/10/623,371
; CURRENT FILING DATE: 2003-07-18
; PRIOR APPLICATION NUMBER: US 10/328,578
; PRIOR FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 10/177,826
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 158
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 8
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-623-371-8

Query Match      68.0%; Score 6.8; DB 19; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
   :|:|:|:|
Db 2 GAACGTCG 10

RESULT 87
US-10-623-371-9
; Sequence 9, Application US/10623371
; Publication No. US20040132677A1
; GENERAL INFORMATION:
```

; APPLICANT: FEARON, Karen L.
; APPLICANT: DINA, Dino
; APPLICANT: TUCK, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-IV
; FILE REFERENCE: 377882002021
; CURRENT APPLICATION NUMBER: US/10/623,371
; CURRENT FILING DATE: 2003-07-18
; PRIOR APPLICATION NUMBER: US 10/328,578
; PRIOR FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 10/177,826
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 158
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 9
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-623-371-9

Query Match 68.0%; Score 6.8; DB 19; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
:|:|:|:|
Db 2 GATCGGTCG 10

RESULT 88
US-10-623-371-10
; Sequence 10, Application US/10623371
; Publication No. US20040132677A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.
; APPLICANT: DINA, Dino
; APPLICANT: TUCK, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-IV
; FILE REFERENCE: 377882002021
; CURRENT APPLICATION NUMBER: US/10/623,371
; CURRENT FILING DATE: 2003-07-18
; PRIOR APPLICATION NUMBER: US 10/328,578
; PRIOR FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 10/177,826
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 158
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 10
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-623-371-10

Query Match 68.0%; Score 6.8; DB 19; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
:|:|:|:|
Db 2 GATCGGTCG 10

RESULT 89
US-10-623-371-11
; Sequence 11, Application US/10623371
; Publication No. US20040132677A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.
; APPLICANT: DINA, Dino
; APPLICANT: TUCK, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-IV
; FILE REFERENCE: 377882002021
; CURRENT APPLICATION NUMBER: US/10/623,371
; CURRENT FILING DATE: 2003-07-18
; PRIOR APPLICATION NUMBER: US 10/328,578
; PRIOR FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 10/177,826
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 158
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 11
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-623-371-11

Query Match 68.0%; Score 6.8; DB 19; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10
:|:|:|:|
Db 2 GATCGGTCG 10

RESULT 90
US-10-623-371-12
; Sequence 12, Application US/10623371
; Publication No. US20040132677A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.
; APPLICANT: DINA, Dino
; APPLICANT: TUCK, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-IV
; FILE REFERENCE: 377882002021
; CURRENT APPLICATION NUMBER: US/10/623,371
; CURRENT FILING DATE: 2003-07-18
; PRIOR APPLICATION NUMBER: US 10/328,578
; PRIOR FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 10/177,826
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 158
; SOFTWARE: FastSEQ for Windows Version 4.0

```
; SEQ ID NO 12
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-623-371-12

Query Match          68.0%; Score 6.8; DB 19; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY      2 DANCCKTCG 10
       :|||:|
Db       2 TAACGGTTCG 10

RESULT 91
US-10-623-371-13
; Sequence 13, Application US/10623371
; Publication No. US20040132677A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.
; APPLICANT: DINA, Dino
; APPLICANT: TUCK, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE REFERENCE: 377882002021
; CURRENT APPLICATION NUMBER: US/10/623,371
; CURRENT FILING DATE: 2003-07-18
; PRIOR APPLICATION NUMBER: US 10/328,578
; PRIOR FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 10/177,826
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/375,253
; NUMBER OF SEQ ID NOS: 158
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 13
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-623-371-13

Query Match          68.0%; Score 6.8; DB 19; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY      2 DANCCKTCG 10
       :|||:|
Db       2 TAACGGTTCG 10

RESULT 92
US-10-623-371-14
; Sequence 14, Application US/10623371
; Publication No. US20040132677A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.
; APPLICANT: DINA, Dino
; APPLICANT: TUCK, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE REFERENCE: 377882002021
; CURRENT APPLICATION NUMBER: US/10/623,371
; CURRENT FILING DATE: 2003-07-18
; PRIOR APPLICATION NUMBER: US 10/328,578
; PRIOR FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 10/177,826
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/375,253
; NUMBER OF SEQ ID NOS: 158
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 14
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-623-371-14

Query Match          68.0%; Score 6.8; DB 19; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY      2 DANCCKTCG 10
       :|||:|
Db       2 TAACGGTTCG 10

RESULT 93
US-10-623-371-15
; Sequence 15, Application US/10623371
; Publication No. US20040132677A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.
; APPLICANT: DINA, Dino
; APPLICANT: TUCK, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE REFERENCE: 377882002021
; CURRENT APPLICATION NUMBER: US/10/623,371
; CURRENT FILING DATE: 2003-07-18
; PRIOR APPLICATION NUMBER: US 10/328,578
; PRIOR FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 10/177,826
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/375,253
; NUMBER OF SEQ ID NOS: 158
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 15
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-623-371-15

Query Match          68.0%; Score 6.8; DB 19; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY      2 DANCCKTCG 10
       :|||:|
Db       2 TAACGGTTCG 10

RESULT 94
US-10-623-371-16
; Sequence 16, Application US/10623371
```

```
; Publication No. US20040132677A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.
; APPLICANT: DINA, Dino
; APPLICANT: TUCK, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-IV
; FILE REFERENCE: 377882002021
; CURRENT APPLICATION NUMBER: US/10/623,371
; CURRENT FILING DATE: 2003-07-18
; PRIOR APPLICATION NUMBER: US 10/328,578
; PRIOR FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 10/177,826
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 158
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 16
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
; NAME/KEY: variation
; LOCATION: 1
; OTHER INFORMATION: n = 5-bromocytosine
US-10-623-371-16
```

```
Query Match 68.0%; Score 6.8; DB 19; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
```

```
QY 2 DANCGKTCG 10
Db 2 GACCGTTCG 10
```

```
RESULT 95
US-10-623-371-17
; Sequence 17, Application US/10623371
; Publication No. US20040132677A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.
; APPLICANT: DINA, Dino
; APPLICANT: TUCK, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-IV
; FILE REFERENCE: 377882002021
; CURRENT APPLICATION NUMBER: US/10/623,371
; CURRENT FILING DATE: 2003-07-18
; PRIOR APPLICATION NUMBER: US 10/328,578
; PRIOR FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 10/177,826
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 158
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 17
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
```

```
; OTHER INFORMATION: Synthetic construct
US-10-623-371-17
Query Match 68.0%; Score 6.8; DB 19; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGKTCG 10
Db 2 GACCGTTCG 10

RESULT 96
US-10-623-371-17/c
; Sequence 17, Application US/10623371
; Publication No. US20040132677A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.
; APPLICANT: DINA, Dino
; APPLICANT: TUCK, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-IV
; FILE REFERENCE: 377882002021
; CURRENT APPLICATION NUMBER: US/10/623,371
; CURRENT FILING DATE: 2003-07-18
; PRIOR APPLICATION NUMBER: US 10/328,578
; PRIOR FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 10/177,826
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 158
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 17
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-623-371-17
```

```
Query Match 68.0%; Score 6.8; DB 19; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGKTCG 10
Db 9 GACCGTTCG 1

RESULT 97
US-10-623-371-18
; Sequence 18, Application US/10623371
; Publication No. US20040132677A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.
; APPLICANT: DINA, Dino
; APPLICANT: TUCK, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-IV
; FILE REFERENCE: 377882002021
; CURRENT APPLICATION NUMBER: US/10/623,371
; CURRENT FILING DATE: 2003-07-18
; PRIOR APPLICATION NUMBER: US 10/328,578
; PRIOR FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 10/177,826
; PRIOR FILING DATE: 2002-06-21
```

; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 158
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 18
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-623-371-18

Query Match 68.0%; Score 6.8; DB 19; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGRKTCG 10
: |||||
Db 2 GACCGTTCG 10

RESULT 98

US-10-623-371-18/c
; Sequence 18, Application US/10623371
; Publication No. US20040132677A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.

; APPLICANT: DINA, Dino
; APPLICANT: TUCK, Stephen F.

; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-IV

; FILE REFERENCE: 377882002021

; CURRENT APPLICATION NUMBER: US/10/623,371

; CURRENT FILING DATE: 2003-07-18

; PRIOR APPLICATION NUMBER: US 10/328,578

; PRIOR FILING DATE: 2002-12-23

; PRIOR APPLICATION NUMBER: US 10/176,883

; PRIOR FILING DATE: 2002-06-21

; PRIOR APPLICATION NUMBER: US 10/177,826

; PRIOR FILING DATE: 2002-06-21

; PRIOR APPLICATION NUMBER: US 60/299,883

; PRIOR FILING DATE: 2001-06-21

; PRIOR APPLICATION NUMBER: US 60/375,253

; PRIOR FILING DATE: 2002-04-23

; NUMBER OF SEQ ID NOS: 158

; SOFTWARE: FastSeq for Windows Version 4.0

; SEQ ID NO 18

; LENGTH: 10

; TYPE: DNA

; ORGANISM: Artificial Sequence

; FEATURE:

; OTHER INFORMATION: Synthetic construct

US-10-623-371-18

Query Match 68.0%; Score 6.8; DB 19; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGRKTCG 10
: |||||
Db 9 GAACGGTTCG 1

RESULT 99

US-10-623-371-19
; Sequence 19, Application US/10623371
; Publication No. US20040132677A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.

; APPLICANT: DINA, Dino
; APPLICANT: TUCK, Stephen F.

; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-IV

; FILE REFERENCE: 377882002021

; CURRENT APPLICATION NUMBER: US/10/623,371

; CURRENT FILING DATE: 2003-07-18

; PRIOR APPLICATION NUMBER: US 10/328,578

; PRIOR FILING DATE: 2002-12-23

; PRIOR APPLICATION NUMBER: US 10/176,883

; PRIOR FILING DATE: 2002-06-21

; PRIOR APPLICATION NUMBER: US 60/299,883

; PRIOR FILING DATE: 2001-06-21

; PRIOR APPLICATION NUMBER: US 60/375,253

; PRIOR FILING DATE: 2002-04-23

; NUMBER OF SEQ ID NOS: 158

; SOFTWARE: FastSeq for Windows Version 4.0

; SEQ ID NO 18

; LENGTH: 10

; TYPE: DNA

; ORGANISM: Artificial Sequence

; FEATURE:

; OTHER INFORMATION: Synthetic construct

US-10-623-371-19

; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-IV

; FILE REFERENCE: 377882002021

; CURRENT APPLICATION NUMBER: US/10/623,371

; CURRENT FILING DATE: 2003-07-18

; PRIOR APPLICATION NUMBER: US 10/328,578

; PRIOR FILING DATE: 2002-12-23

; PRIOR APPLICATION NUMBER: US 10/176,883

; PRIOR FILING DATE: 2002-06-21

; PRIOR APPLICATION NUMBER: US 10/177,826

; PRIOR FILING DATE: 2002-06-21

; PRIOR APPLICATION NUMBER: US 60/299,883

; PRIOR FILING DATE: 2001-06-21

; PRIOR APPLICATION NUMBER: US 60/375,253

; PRIOR FILING DATE: 2002-04-23

; NUMBER OF SEQ ID NOS: 158

; SOFTWARE: FastSeq for Windows Version 4.0

; SEQ ID NO 19

; LENGTH: 10

; TYPE: DNA

; ORGANISM: Artificial Sequence

; FEATURE:

; OTHER INFORMATION: Synthetic construct

; NAME/KEY: variation

; LOCATION: 1

; OTHER INFORMATION: n = 5-bromocytosine

US-10-623-371-19

Query Match 68.0%; Score 6.8; DB 19; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCGRKTCG 10
: |||||
Db 2 GACCGTTCG 10

RESULT 100

US-10-623-371-20

; Sequence 20, Application US/10623371

; Publication No. US20040132677A1

; GENERAL INFORMATION:

; APPLICANT: FEARON, Karen L.

; APPLICANT: DINA, Dino

; APPLICANT: TUCK, Stephen F.

; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-IV

; FILE REFERENCE: 377882002021

; CURRENT APPLICATION NUMBER: US/10/623,371

; CURRENT FILING DATE: 2003-07-18

; PRIOR APPLICATION NUMBER: US 10/328,578

; PRIOR FILING DATE: 2002-12-23

; PRIOR APPLICATION NUMBER: US 10/176,883

; PRIOR FILING DATE: 2002-06-21

; PRIOR APPLICATION NUMBER: US 10/177,826

; PRIOR FILING DATE: 2002-06-21

; PRIOR APPLICATION NUMBER: US 60/299,883

; PRIOR FILING DATE: 2001-06-21

; PRIOR APPLICATION NUMBER: US 60/375,253

; PRIOR FILING DATE: 2002-04-23

; NUMBER OF SEQ ID NOS: 158

; SOFTWARE: FastSeq for Windows Version 4.0

; SEQ ID NO 20

; LENGTH: 10

; TYPE: DNA

; ORGANISM: Artificial Sequence

; FEATURE:

; OTHER INFORMATION: Synthetic construct

US-10-623-371-20

Query Match 68.0%; Score 6.8; DB 19; Length 10;
Best Local Similarity 66.7%; Pred. No. 2.3e+05;

Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

QY 2 DANCCKTCG 10

Db 2 TAACGCTCG 10

Search completed: June 30, 2005, 03:50:46
Job time : 289.5 secs

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OM nucleic - nucleic search, using sw model

Run on: June 29, 2005, 16:33:43 ; Search time 219.5 Seconds
(without alignments)
269.692 Million cell updates/sec

Title: US-10-033-243-77

Perfect score: 10

Sequence: 1 cgaacgttcg 10

Scoring table: IDENTITY NUC

Gapop 10.0 , Gapext 1.0

Searched: 4390206 seqs, 2959870667 residues

Total number of hits satisfying chosen parameters: 8780412

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 100 summaries

Database :

N_Geneseq_16Dec04:*

1: Geneseqn1980s:*

2: Geneseqn1990s:*

3: Geneseqn2000s:*

4: Geneseqn2001as:*

5: Geneseqn2001bs:*

6: Geneseqn2002as:*

7: Geneseqn2002bs:*

8: Geneseqn2003as:*

9: Geneseqn2003bs:*

10: Geneseqn2003cs:*

11: Geneseqn2003ds:*

12: Geneseqn2004as:*

13: Geneseqn2004bs:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	10	100.0	10	6	Abq75136 ISS immun
2	10	100.0	10	6	Abq75136 ISS immun
3	10	100.0	10	9	Adb88814 Chimeric
4	10	100.0	10	9	Adb88814 Chimeric
5	10	100.0	10	12	Adk67580 Immunost
6	10	100.0	10	12	Adk67580 Immunost
7	10	100.0	10	12	Adk67584 Immunost
8	10	100.0	10	12	Adk67584 Immunost
9	10	100.0	10	12	Adq95321 Branched
10	10	100.0	10	12	Adq95321 Branched
11	10	100.0	10	12	Adq95322 Branched
12	10	100.0	10	12	Adq95322 Branched
13	10	100.0	10	12	Adq95323 Branched
14	10	100.0	10	12	Adq95323 Branched
15	10	100.0	10	12	Adq95277 Branched
16	10	100.0	10	12	Adq95277 Branched
17	10	100.0	10	12	Adq95275 Branched
18	10	100.0	10	12	Adq95275 Branched
19	10	100.0	11	6	Abq75229 ISS immun
20	10	100.0	11	6	Abq75229 ISS immun

21	10	100.0	11	9	ADB88900	ADB88900 Chimeric
22	10	100.0	11	9	ADB88900	ADB88900 Chimeric
23	10	100.0	11	12	ADQ95385	ADQ95385 Branched
24	10	100.0	11	12	ADQ95385	ADQ95385 Branched
25	10	100.0	11	12	ADQ95388	ADQ95388 Branched
26	10	100.0	11	12	ADQ95388	ADQ95388 Branched
27	10	100.0	11	12	ADQ95361	ADQ95361 Branched
28	10	100.0	11	12	ADQ95361	ADQ95361 Branched
29	10	100.0	11	12	ADQ95376	ADQ95376 Branched
30	10	100.0	11	12	ADQ95376	ADQ95376 Branched
31	10	100.0	11	12	ADQ95387	ADQ95387 Branched
32	10	100.0	11	12	ADQ95387	ADQ95387 Branched
33	10	100.0	11	13	ADQ16825	ADQ16825 Immunomod
34	10	100.0	11	13	ADQ16825	ADQ16825 Immunomod
35	10	100.0	12	12	ADQ95393	ADQ95393 Branched
36	10	100.0	12	12	ADQ95393	ADQ95393 Branched
37	10	100.0	12	13	ADQ16824	ADQ16824 Immunomod
38	10	100.0	12	13	ADQ16824	ADQ16824 Immunomod
39	10	100.0	13	5	ABC16000	ABC16000 Oligonucl
40	10	100.0	13	5	ABC16000	ABC16000 Oligonucl
41	10	100.0	13	5	ABC16001	ABC16001 Oligonucl
42	10	100.0	13	5	ABC16001	ABC16001 Oligonucl
43	10	100.0	13	6	ABQ75224	ABQ75224 ISS immun
44	10	100.0	13	6	ABQ75224	ABQ75224 ISS immun
45	10	100.0	13	6	ABQ75225	ABQ75225 ISS immun
46	10	100.0	13	6	ABQ75225	ABQ75225 ISS immun
47	10	100.0	13	12	ADQ95397	ADQ95397 Branched
48	10	100.0	13	12	ADQ95397	ADQ95397 Branched
49	10	100.0	13	13	ADQ16823	ADQ16823 Immunomod
50	10	100.0	13	13	ADQ16823	ADQ16823 Immunomod
51	10	100.0	14	6	ABQ75377	ABQ75377 ISS immun
52	10	100.0	14	6	ABQ75377	ABQ75377 ISS immun
53	10	100.0	14	9	ADB88895	ADB88895 Chimeric
54	10	100.0	14	9	ADB88895	ADB88895 Chimeric
55	10	100.0	14	9	ADB88901	ADB88901 Chimeric
56	10	100.0	14	9	ADB88901	ADB88901 Chimeric
57	10	100.0	14	12	ADK67588	ADK67588 Immunost
58	10	100.0	14	12	ADK67588	ADK67588 Immunost
59	10	100.0	14	12	ADQ95381	ADQ95381 Branched
60	10	100.0	14	12	ADQ95381	ADQ95381 Branched
61	10	100.0	14	12	ADQ95391	ADQ95391 Branched
62	10	100.0	14	12	ADQ95391	ADQ95391 Branched
63	10	100.0	14	12	ADQ95358	ADQ95358 Branched
64	10	100.0	14	12	ADQ95358	ADQ95358 Branched
65	10	100.0	14	12	ADQ95356	ADQ95356 Branched
66	10	100.0	14	12	ADQ95356	ADQ95356 Branched
67	10	100.0	14	12	ADQ95390	ADQ95390 Branched
68	10	100.0	14	12	ADQ95390	ADQ95390 Branched
69	10	100.0	14	12	ADQ95394	ADQ95394 Branched
70	10	100.0	14	12	ADQ95394	ADQ95394 Branched
71	10	100.0	14	12	ADQ95395	ADQ95395 Branched
72	10	100.0	14	12	ADQ95395	ADQ95395 Branched
73	10	100.0	14	12	ADQ95362	ADQ95362 Branched
74	10	100.0	14	12	ADQ95362	ADQ95362 Branched
75	10	100.0	14	13	ADQ16877	ADQ16877 Immunomod
76	10	100.0	14	13	ADQ16877	ADQ16877 Immunomod
77	10	100.0	14	13	ADQ16819	ADQ16819 Immunomod
78	10	100.0	14	13	ADQ16819	ADQ16819 Immunomod
79	10	100.0	15	13	ADQ16822	ADQ16822 Immunomod
80	10	100.0	15	13	ADQ16822	ADQ16822 Immunomod
81	10	100.0	16	6	ABQ75162	ABQ75162 ISS immun
82	10	100.0	16	6	ABQ75162	ABQ75162 ISS immun
83	10	100.0	16	9	ADB88830	ADB88830 Chimeric
84	10	100.0	16	9	ADB88830	ADB88830 Chimeric
85	10	100.0	16	12	ADK67587	ADK67587 Immunost
86	10	100.0	16	12	ADK67587	ADK67587 Immunost
87	10	100.0	16	12	ADQ95291	ADQ95291 Branched
88	10	100.0	16	12	ADQ95291	ADQ95291 Branched
89	10	100.0	16	13	ADQ16821	ADQ16821 Immunomod
90	10	100.0	16	13	ADQ16821	ADQ16821 Immunomod
91	10	100.0	16	13	ADQ16733	ADQ16733 Immunomod
92	10	100.0	16	13	ADQ16733	ADQ16733 Immunomod
93	10	100.0	17	13	ADQ16775	ADQ16775 Immunomod

C 94 10 100.0 17 13 ADQ16775 Immunomod
 95 10 100.0 18 6 ABQ75165
 C 96 10 100.0 18 6 ABQ75165
 97 10 100.0 18 9 ADB88833
 C 98 10 100.0 18 9 ADB88833
 99 10 100.0 18 12 ADQ95294
 C 100 10 100.0 18 12 ADQ95294

ALIGNMENTS

RESULT 1
 ABQ75136
 ID ABQ75136 standard; DNA; 10 BP.
 XX
 AC ABQ75136;
 XX
 DT 05-NOV-2002 (first entry)
 XX
 DE ISS immunomodulatory oligonucleotide SEQ ID NO:77.
 XX
 KW Immunostimulatory sequence; ISS: immunomodulatory; immune response;
 KW allergy; asthma; infectious disease; interferon-gamma; IFN-gamma;
 KW idiopathic pulmonary fibrosis; viral infection; mycobacterial disease;
 KW malaria; leishmaniasis; toxoplasmosis; schistosomiasis; clonorchiasis;
 KW immunoglobulin E; IgE-related disorder; antiallergic; antiasthmatic;
 KW virucide; antibacterial; protozoacide; ss.
 XX
 OS Synthetic.
 XX
 PN WO200252002-A2.
 XX
 PD 04-JUL-2002.
 XX
 PF 27-DEC-2001; 2001WO-US050821.
 XX
 PR 27-DEC-2000; 2000US-0258675P.
 XX
 PA (DYNA-) DYNAVAX TECHNOLOGIES CORP.
 XX
 PI Fearon KL, Dina D;
 XX
 DR WPI; 2002-657426/70.
 XX
 PT Immunomodulatory polynucleotide for modulating an immune response in a
 PT subject suffering from disorders associated with Th2-type immune
 PT response, e.g. allergy, or infectious disease, comprises an
 PT immunostimulatory sequence.
 XX
 PS Claim 3; Page 88; 95pp; English.
 XX
 CC The present invention describes an immunomodulatory polynucleotide (I)
 CC comprising an immunostimulatory sequence (ISS). Also described: (1) an
 CC immunomodulatory composition comprising (1); (2) an immunomodulatory
 CC polynucleotide/microcarrier (IMP/MC) complex, comprising (1) linked to a
 CC biodegradable MC, where the MC is less than 10 micrometre in size; and
 CC (3) a kit comprising (1). (1) has antiallergic, antiasthmatic, virucide,
 CC antibacterial and protozoacide activities, and can be used as a modulator
 CC of immune response. (1) is useful for modulating an immune response in an
 CC individual suffering from disorders associated with a Th2-type immune
 CC response, especially an allergy or asthma, or an infectious disease. (1)
 CC is also useful for increasing interferon-gamma (IFN-gamma) in an
 CC individual having idiopathic pulmonary fibrosis, or IFN-alpha in an
 CC individual having a viral infection. (1) is further useful for
 CC ameliorating a symptom of an infectious disease caused by a cellular
 CC pathogen such as mycobacterial disease, malaria, leishmaniasis,
 CC toxoplasmosis, schistosomiasis and clonorchiasis in an individual, or a
 CC symptom of an immunoglobulin E (IgE)-related disorder, preferably an
 CC allergy-related disorder, in particular asthma in an individual. The
 CC present sequence represents an immunomodulatory oligonucleotide which is
 CC specifically claimed in the present invention

SQ Sequence 10 BP; 2 A; 3 C; 3 G; 2 T; 0 U; 0 Other;
 Query Match 100.0%; Score 10; DB 6; Length 10;
 Best Local Similarity 100.0%; Pred. No. 4.7e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 CGAACGTTTCG 10
 Db 1 CGAACGTTTCG 10
 RESULT 2
 ABQ75136/c
 ID ABQ75136 standard; DNA; 10 BP.
 XX
 AC ABQ75136;
 XX
 DT 05-NOV-2002 (first entry)
 XX
 DE ISS immunomodulatory oligonucleotide SEQ ID NO:77.
 XX
 KW Immunostimulatory sequence; ISS: immunomodulatory; immune response;
 KW allergy; asthma; infectious disease; interferon-gamma; IFN-gamma;
 KW idiopathic pulmonary fibrosis; viral infection; mycobacterial disease;
 KW malaria; leishmaniasis; toxoplasmosis; schistosomiasis; clonorchiasis;
 KW immunoglobulin E; IgE-related disorder; antiallergic; antiasthmatic;
 KW virucide; antibacterial; protozoacide; ss.
 XX
 OS Synthetic.
 XX
 PN WO200252002-A2.
 XX
 PD 04-JUL-2002.
 XX
 PF 27-DEC-2001; 2001WO-US050821.
 XX
 PR 27-DEC-2000; 2000US-0258675P.
 XX
 PA (DYNA-) DYNAVAX TECHNOLOGIES CORP.
 XX
 PI Fearon KL, Dina D;
 XX
 DR WPI; 2002-657426/70.
 XX
 PT Immunomodulatory polynucleotide for modulating an immune response in a
 PT subject suffering from disorders associated with Th2-type immune
 PT response, e.g. allergy, or infectious disease, comprises an
 PT immunostimulatory sequence.
 XX
 PS Claim 3; Page 88; 95pp; English.
 XX
 CC The present invention describes an immunomodulatory polynucleotide (I)
 CC comprising an immunostimulatory sequence (ISS). Also described: (1) an
 CC immunomodulatory composition comprising (1); (2) an immunomodulatory
 CC polynucleotide/microcarrier (IMP/MC) complex, comprising (1) linked to a
 CC biodegradable MC, where the MC is less than 10 micrometre in size; and
 CC (3) a kit comprising (1). (1) has antiallergic, antiasthmatic, virucide,
 CC antibacterial and protozoacide activities, and can be used as a modulator
 CC of immune response. (1) is useful for modulating an immune response in an
 CC individual suffering from disorders associated with a Th2-type immune
 CC response, especially an allergy or asthma, or an infectious disease. (1)
 CC is also useful for increasing interferon-gamma (IFN-gamma) in an
 CC individual having idiopathic pulmonary fibrosis, or IFN-alpha in an
 CC individual having a viral infection. (1) is further useful for
 CC ameliorating a symptom of an infectious disease caused by a cellular
 CC pathogen such as mycobacterial disease, malaria, leishmaniasis,
 CC toxoplasmosis, schistosomiasis and clonorchiasis in an individual, or a
 CC symptom of an immunoglobulin E (IgE)-related disorder, preferably an
 CC allergy-related disorder, in particular asthma in an individual. The
 CC present sequence represents an immunomodulatory oligonucleotide which is
 CC specifically claimed in the present invention

Query Match 100.0%; Score 10; DB 6; Length 10;
Best Local Similarity 100.0%; Pred. No. 4.7e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
| | | | | | | | | |
Db 10 CGAACGTTTCG 1

RESULT 3

ADB88814
ID ADB88814 standard; DNA; 10 BP.

XX AC ADB88814;
XX XX

DT 04-DEC-2003 (first entry)

DE Chimeric immunomodulatory compound DNA sequence, SEQ ID No 17.

XX chimeric immunomodulatory compound; CIC; immunomodulatory activity;
KW spacer moiety; linear hexaethylene glycol structure; HEG; immune;
KW Th2-type; allergy; allergy-induced asthma; infectious disease; IFN-gamma;
KW IFN-alpha; idiopathic pulmonary fibrosis; viral infection; ameliorating;
KW immunoglobulin E; IgE; allergy; cancer;
KW stimulating cellular immune system cell; ss.

XX OS Synthetic.

XX XX WO2003009222-A2.

XX PN 03-JAN-2003.

XX PD 21-JUN-2002; 2002WO-US020025.

XX PF 21-JUN-2001; 2001US-0299883P.

XX PR 23-APR-2002; 2002US-0375253P.

XX PA (DYNA-) DYNAVAX TECHNOLOGIES CORP.

XX PI Fearon KL, Dina D, Tuck SF;

XX XX WPI; 2003-210159/20.

XX Novel chimeric immunomodulatory compound having immunomodulatory
PT activity, useful for modulating an immune response and for treating
PT cancer, has nucleic acid moieties and non-nucleic acid spacer moieties.

XX PS Disclosure; Page 33; 224pp; English.

XX The invention relates to a novel chimeric immunomodulatory compound (CIC)
CC having immunomodulatory activity, comprising two or more nucleic acid
CC moieties and one or more non-nucleic acid spacer moieties, where at least
CC one non-nucleic acid spacer moiety is covalently joined to two nucleic
CC acid moieties, where the spacer is not a polypeptide, and at least one
CC nucleic acid moiety comprises the sequence 5'-CG-3'. The chimeric
CC immunomodulatory compounds more specifically contain the nucleic acid
CC spacer moieties of linear hexaethylene glycol structure (HEG) subunits.
CC CIC's are useful for modulating an immune response in an individual,
CC where the individual suffers from a disorder associated with a Th2-type
CC immune response which is an allergy or allergy-induced asthma, and an
CC infectious disease. CIC is also useful for increasing IFN-gamma; or IFN-
CC alpha; in an individual, where the individual has idiopathic pulmonary
CC fibrosis, or a viral infection. CIC's are useful for ameliorating a
CC symptom of an infectious disease, or an immunoglobulin E (IgE)-related
CC disorder in an individual, where the IgE-related disorder is allergy, or
CC an allergy-related disorder. CIC's are also useful for treating cancer
CC and can be used for stimulating cellular immune system cells production
CC in an individual. This polynucleotide sequence represents a DNA sequence
CC which is a nucleic acid moiety part of a chimeric immunomodulatory compound
CC of the invention.

XX SQ Sequence 10 BP; 2 A; 3 C; 3 G; 2 T; 0 U; 0 Other;

Query Match 100.0%; Score 10; DB 9; Length 10;
Best Local Similarity 100.0%; Pred. No. 4.7e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
| | | | | | | | | |
Db 1 CGAACGTTTCG 10

RESULT 4

ADB88814/c
ID ADB88814 standard; DNA; 10 BP.

XX AC ADB88814;
XX XX

DT 04-DEC-2003 (first entry)

DE Chimeric immunomodulatory compound DNA sequence, SEQ ID No 17.

XX chimeric immunomodulatory compound; CIC; immunomodulatory activity;
KW spacer moiety; linear hexaethylene glycol structure; HEG; immune;
KW Th2-type; allergy; allergy-induced asthma; infectious disease; IFN-gamma;
KW IFN-alpha; idiopathic pulmonary fibrosis; viral infection; ameliorating;
KW immunoglobulin E; IgE; allergy; cancer;
KW stimulating cellular immune system cell; ss.

XX OS Synthetic.

XX XX WO2003009222-A2.

XX PN 03-JAN-2003.

XX PD 21-JUN-2002; 2002WO-US020025.

XX PF 21-JUN-2001; 2001US-0299883P.

XX PR 23-APR-2002; 2002US-0375253P.

XX PA (DYNA-) DYNAVAX TECHNOLOGIES CORP.

XX PI Fearon KL, Dina D, Tuck SF;

XX XX WPI; 2003-210159/20.

XX Novel chimeric immunomodulatory compound having immunomodulatory
PT activity, useful for modulating an immune response and for treating
PT cancer, has nucleic acid moieties and non-nucleic acid spacer moieties.

XX PS Disclosure; Page 33; 224pp; English.

XX The invention relates to a novel chimeric immunomodulatory compound (CIC)
CC having immunomodulatory activity, comprising two or more nucleic acid
CC moieties and one or more non-nucleic acid spacer moieties, where at least
CC one non-nucleic acid spacer moiety is covalently joined to two nucleic
CC acid moieties, where the spacer is not a polypeptide, and at least one
CC nucleic acid moiety comprises the sequence 5'-CG-3'. The chimeric
CC immunomodulatory compounds more specifically contain the nucleic acid
CC spacer moieties of linear hexaethylene glycol structure (HEG) subunits.
CC CIC's are useful for modulating an immune response in an individual,
CC where the individual suffers from a disorder associated with a Th2-type
CC immune response which is an allergy or allergy-induced asthma, and an
CC infectious disease. CIC is also useful for increasing IFN-gamma; or IFN-
CC alpha; in an individual, where the individual has idiopathic pulmonary
CC fibrosis, or a viral infection. CIC's are useful for ameliorating a
CC symptom of an infectious disease, or an immunoglobulin E (IgE)-related
CC disorder in an individual, where the IgE-related disorder is allergy, or
CC an allergy-related disorder. CIC's are also useful for treating cancer
CC and can be used for stimulating cellular immune system cells production
CC in an individual. This polynucleotide sequence represents a DNA sequence
CC which is a nucleic acid moiety part of a chimeric immunomodulatory compound
CC of the invention.

XX SQ Sequence 10 BP; 2 A; 3 C; 3 G; 2 T; 0 U; 0 Other;

Query Match 100.0%; Score 10; DB 9; Length 10;
Best Local Similarity 100.0%; Pred. No. 4.7e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
|||||:||||
Db 10 CGAACGTTTCG 1

RESULT 5
ADK67580
ID ADK67580 standard; DNA; 10 BP.
XX
AC ADK67580;
XX
DT 06-MAY-2004 (first entry)
XX
DE Immunostimulant oligonucleotide used in immunomodulatory composition.
XX
KW Immunomodulator; immunostimulant; vaccine; DNA-RNA hybrid; ss.
XX
OS Synthetic.
XX
PH Key Location/Qualifiers
FT modified_base 1 /*tag= a
FT /mod_base= OTHER
FT /note= "OTHER= 5-bromocytosine"
FT modified_base 5
FT /*tag= b
FT /mod_base= OTHER
FT /note= "OTHER= 5-bromocytosine"
XX
PN WO2004014322-A2.
XX
PD 19-FEB-2004.
XX
PF 12-AUG-2003; 2003WO-US025415.
XX
PR 12-AUG-2002; 2002US-0402968P.
XX
PA (DYNA-) DYNAVAX TECHNOLOGIES CORP.
XX
PI Van Nest G, Tuck S;
XX
DR WPI; 2004-238627/22.
XX
PT Immunomodulatory composition useful for modulating immune responses in
PT individuals, comprises immunomodulatory particles or a particulate
PT composition made by mixing cationic condensing agent and an
PT immunomodulatory compound.
XX
PS Disclosure; SEQ ID NO 10; 90pp; English.
XX

CC The present sequence is that of an immunomodulatory compound (IMC) that
CC can be used in novel immunomodulatory compositions of the invention. The
CC IMC may contain modifications of the 3'OH or 5'OH group, the nucleotide
CC base, the sugar component and phosphate group. Novel immunomodulatory
CC compositions of the invention comprise a cationic condensing agent, an
CC IMC comprising the nucleotide sequence 5'-CG-3', and a stabilising agent.
CC The compositions form particles which have increased immunomodulatory
CC activity as compared to IMCs not formulated in the compositions of the
CC invention. The immunomodulatory compositions can be used for
CC immunomodulation of an individual, e.g. when the individual suffers from
CC a disorder associated with a Th2-type immune response (e.g. allergies or
CC allergy-induced asthma), is receiving vaccines such as therapeutic
CC vaccines (e.g. vaccines comprising an allergy epitope, a mycobacterial
CC epitope or a tumour associated epitope) or prophylactic vaccines, suffers
CC from cancer, suffers from an infectious disease or is at risk of exposure
CC to an infectious agent.
XX

SQ Sequence 10 BP; 2 A; 3 C; 3 G; 1 T; 1 U; 0 Other;

Query Match 100.0%; Score 10; DB 12; Length 10;
Best Local Similarity 90.0%; Pred. No. 4.7e+03;
Matches 9; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
|||||:||||
Db 1 CGAACGTTTCG 10

RESULT 6
ADK67580/c
ID ADK67580 standard; DNA; 10 BP.
XX
AC ADK67580;
XX
DT 06-MAY-2004 (first entry)
XX
DE Immunostimulant oligonucleotide used in immunomodulatory composition.
XX
KW Immunomodulator; immunostimulant; vaccine; DNA-RNA hybrid; ss.
XX
OS Synthetic.
XX
PH Key Location/Qualifiers
FT modified_base 1 /*tag= a
FT /mod_base= OTHER
FT /note= "OTHER= 5-bromocytosine"
FT modified_base 5
FT /*tag= b
FT /mod_base= OTHER
FT /note= "OTHER= 5-bromocytosine"
XX
PN WO2004014322-A2.
XX
PD 19-FEB-2004.
XX
PF 12-AUG-2003; 2003WO-US025415.
XX
PR 12-AUG-2002; 2002US-0402968P.
XX
PA (DYNA-) DYNAVAX TECHNOLOGIES CORP.
XX
PI Van Nest G, Tuck S;
XX
DR WPI; 2004-238627/22.
XX
PT Immunomodulatory composition useful for modulating immune responses in
PT individuals, comprises immunomodulatory particles or a particulate
PT composition made by mixing cationic condensing agent and an
PT immunomodulatory compound.
XX
PS Disclosure; SEQ ID NO 10; 90pp; English.
XX

CC The present sequence is that of an immunomodulatory compound (IMC) that
CC can be used in novel immunomodulatory compositions of the invention. The
CC IMC may contain modifications of the 3'OH or 5'OH group, the nucleotide
CC base, the sugar component and phosphate group. Novel immunomodulatory
CC compositions of the invention comprise a cationic condensing agent, an
CC IMC comprising the nucleotide sequence 5'-CG-3', and a stabilising agent.
CC The compositions form particles which have increased immunomodulatory
CC activity as compared to IMCs not formulated in the compositions of the
CC invention. The immunomodulatory compositions can be used for
CC immunomodulation of an individual, e.g. when the individual suffers from
CC a disorder associated with a Th2-type immune response (e.g. allergies or
CC allergy-induced asthma), is receiving vaccines such as therapeutic
CC vaccines (e.g. vaccines comprising an allergy epitope, a mycobacterial
CC epitope or a tumour associated epitope) or prophylactic vaccines, suffers
CC from cancer, suffers from an infectious disease or is at risk of exposure
CC to an infectious agent.
XX

SQ Sequence 10 BP; 2 A; 3 C; 3 G; 1 T; 1 U; 0 Other;

Query Match 100.0%; Score 10; DB 12; Length 10;
 Best Local Similarity 100.0%; Pred. No. 4.7e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
 |||||
 Db 10 CGAACGTTTCG 1

RESULT 7

ADK67584
 ID ADK67584 standard; DNA; 10 BP.
 AC ADK67584;
 XX
 XX
 DT 06-MAY-2004 (first entry)
 DE Immunostimulant oligonucleotide used in immunomodulatory composition.
 XX
 KW Immunostimulant; immunostimulant; vaccine; ss.
 XX
 OS Synthetic.
 XX
 PN WO2004014322-A2.
 PD 19-FEB-2004.
 XX
 PF 12-AUG-2003; 2003WO-US025415.
 XX
 PR 12-AUG-2002; 2002US-0402968P.
 XX
 PA (DYNA-) DYNAVAX TECHNOLOGIES CORP.
 XX
 PI Van Nest G, Tuck S;
 XX
 DR WPI; 2004-238627/22.

XX Immunomodulatory composition useful for modulating immune responses in
 PT individuals, comprises immunomodulatory particles or a particulate
 PT composition made by mixing cationic condensing agent and an
 PT immunomodulatory compound.
 XX
 PS Disclosure; SEQ ID NO 14; 90pp; English.
 XX
 CC The present sequence is that of an immunomodulatory compound (IMC) that
 CC can be used in novel immunomodulatory compositions of the invention. The
 CC IMC may contain modifications of the 3'OH or 5'OH group, the nucleotide
 CC base, the sugar component and phosphate group. Novel immunomodulatory
 CC compositions of the invention comprise a cationic condensing agent, an
 CC IMC comprising the nucleotide sequence 5'-CG-3', and a stabilising agent.
 CC The compositions form particles which have increased immunomodulatory
 CC activity as compared to IMCs not formulated in the compositions of the
 CC invention. The immunomodulatory compositions can be used for
 CC immunomodulation of an individual, e.g. when the individual suffers from
 CC a disorder associated with a Th2-type immune response (e.g. allergies or
 CC allergy-induced asthma), is receiving vaccines such as therapeutic
 CC vaccines (e.g. vaccines comprising an allergy epitope, a mycobacterial
 CC epitope or a tumour associated epitope) or prophylactic vaccines, suffers
 CC from cancer, suffers from an infectious disease or is at risk of exposure
 CC to an infectious agent.

SQ Sequence 10 BP; 2 A; 3 C; 3 G; 2 T; 0 U; 0 Other;

Query Match 100.0%; Score 10; DB 12; Length 10;
 Best Local Similarity 100.0%; Pred. No. 4.7e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
 |||||
 Db 1 CGAACGTTTCG 10

RESULT 8

ADK67584/c
 ID ADK67584 standard; DNA; 10 BP.
 XX
 AC ADK67584;
 XX
 DT 06-MAY-2004 (first entry)
 DE Immunostimulant oligonucleotide used in immunomodulatory composition.
 XX
 KW Immunostimulant; immunostimulant; vaccine; ss.
 XX
 OS Synthetic.
 XX
 PN WO2004014322-A2.
 PD 19-FEB-2004.
 XX
 PF 12-AUG-2003; 2003WO-US025415.
 XX
 PR 12-AUG-2002; 2002US-0402968P.
 XX
 PA (DYNA-) DYNAVAX TECHNOLOGIES CORP.
 XX
 PI Van Nest G, Tuck S;
 XX
 DR WPI; 2004-238627/22.

XX Immunomodulatory composition useful for modulating immune responses in
 PT individuals, comprises immunomodulatory particles or a particulate
 PT composition made by mixing cationic condensing agent and an
 PT immunomodulatory compound.
 XX
 PS Disclosure; SEQ ID NO 14; 90pp; English.
 XX
 CC The present sequence is that of an immunomodulatory compound (IMC) that
 CC can be used in novel immunomodulatory compositions of the invention. The
 CC IMC may contain modifications of the 3'OH or 5'OH group, the nucleotide
 CC base, the sugar component and phosphate group. Novel immunomodulatory
 CC compositions of the invention comprise a cationic condensing agent, an
 CC IMC comprising the nucleotide sequence 5'-CG-3', and a stabilising agent.
 CC The compositions form particles which have increased immunomodulatory
 CC activity as compared to IMCs not formulated in the compositions of the
 CC invention. The immunomodulatory compositions can be used for
 CC immunomodulation of an individual, e.g. when the individual suffers from
 CC a disorder associated with a Th2-type immune response (e.g. allergies or
 CC allergy-induced asthma), is receiving vaccines such as therapeutic
 CC vaccines (e.g. vaccines comprising an allergy epitope, a mycobacterial
 CC epitope or a tumour associated epitope) or prophylactic vaccines, suffers
 CC from cancer, suffers from an infectious disease or is at risk of exposure
 CC to an infectious agent.

SQ Sequence 10 BP; 2 A; 3 C; 3 G; 2 T; 0 U; 0 Other;

Query Match 100.0%; Score 10; DB 12; Length 10;
 Best Local Similarity 100.0%; Pred. No. 4.7e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
 |||||
 Db 10 CGAACGTTTCG 1

RESULT 9

ADQ95321
 ID ADQ95321 standard; DNA; 10 BP.
 XX
 AC ADQ95321;
 XX
 DT 07-OCT-2004 (first entry)
 DE Branched immunomodulatory compound related oligonucleotide, SEQ ID 63.
 XX

CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
 CC leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases
 CC caused by intracellular parasites such as malaria; leishmaniasis,
 CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
 CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
 CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
 CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.
 XX
 SQ Sequence 10 BP; 2 A; 3 C; 3 G; 2 T; 0 U; 0 Other;
 Query Match 100.0%; Score 10; DB 12; Length 10;
 Best Local Similarity 100.0%; Pred. No. 4.7e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 1 CGAACGTTTCG 10
 Db 10 CGAACGTTTCG 1
 RESULT 11
 ID ADQ95322 standard; DNA; 10 BP.
 AC ADQ95322;
 DT 07-OCT-2004 (first entry)
 DE Branched immunomodulatory compound related oligonucleotide, SEQ ID 64.
 KW Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
 KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
 KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
 KW Gastrointestinal; Nephrotropic; Antiparasitic; Antimalarial; Antiulcer;
 KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
 IFN-alpha; ss.
 OS Synthetic.
 FH Key Location/Qualifiers
 FT modified_base 1 /*tag= a
 FT /mod_base= OTHER
 FT /note= "c= 5-bromocytosine"
 FT modified_base 5
 FT /*tag= b
 FT /mod_base= OTHER
 FT /note= "c= 5-bromocytosine"
 PN WO2004058159-A2.
 XX
 PD 15-JUL-2004.
 XX
 PP 17-DEC-2003; 2003WO-US040417.
 XX
 PR 23-DEC-2002; 2002US-0436406P.
 XX
 PA (DYNA-) DYNAVAX TECHNOLOGIES CORP.
 XX
 PI Fearon KL;
 XX
 DR WPI; 2004-561515/54.
 XX
 XX New branched immunomodulatory compound comprising at least three nucleic
 FT acid moieties and at least one branch-point nucleoside, useful for
 FT modulating an immune response in individual suffering e.g. allergy.
 FT
 XX Disclosure; SEQ ID NO 64; 183pp; English.
 PS
 CC The present invention relates to novel branched immunomodulatory
 CC compounds (BIC) comprising at least three nucleic acid moieties, at least
 CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one

CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
 CC e.g. the ability to stimulate interferon (IFN)-gamma production from
 CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
 CC alpha production from human peripheral blood mononuclear cells and the
 CC ability to stimulate B cell proliferation. The BIC compounds are useful
 CC for modulating an immune response in an individual suffering from a
 CC disorder associated with a T helper (Th)2-type immune response e.g.
 CC allergy, allergic-induced asthma or an infectious disease; for increasing
 CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
 CC are also useful for immunomodulation of cells and individuals; in the
 CC fields of biomedicine and immunology; for the manufacture of a medicament
 CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
 CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
 CC ameliorating an IGE-related disorder in an individual. The disorders
 CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
 CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
 CC cancer; infectious disease resistant to humoral immune responses (e.g.
 CC diseases caused by mycobacterial infections and intracellular pathogens,
 CC cellular pathogens e.g. bacteria or protozoans or by subcellular
 CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
 CC leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases
 CC caused by intracellular parasites such as malaria; leishmaniasis,
 CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
 CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
 CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
 CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.
 XX
 SQ Sequence 10 BP; 2 A; 3 C; 3 G; 2 T; 0 U; 0 Other;
 Query Match 100.0%; Score 10; DB 12; Length 10;
 Best Local Similarity 100.0%; Pred. No. 4.7e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 1 CGAACGTTTCG 10
 Db 1 CGAACGTTTCG 10
 RESULT 12
 ID ADQ95322/c
 AC ADQ95322;
 DT 07-OCT-2004 (first entry)
 DE Branched immunomodulatory compound related oligonucleotide, SEQ ID 64.
 KW Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
 KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
 KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
 KW Gastrointestinal; Nephrotropic; Antiparasitic; Antimalarial; Antiulcer;
 KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
 IFN-alpha; ss.
 OS Synthetic.
 FH Key Location/Qualifiers
 FT modified_base 1 /*tag= a
 FT /mod_base= OTHER
 FT /note= "c= 5-bromocytosine"
 FT modified_base 5
 FT /*tag= b
 FT /mod_base= OTHER
 FT /note= "c= 5-bromocytosine"
 XX WO2004058159-A2.
 XX
 PD 15-JUL-2004.
 XX

PF 17-DEC-2003; 2003WO-US040417.
 XX
 PR 23-DEC-2002; 2002US-0436406P.
 XX
 XX (DYNA-) DYNAVAX TECHNOLOGIES CORP.
 PA Fearon KL;
 PI WPI; 2004-561515/54.
 DR
 XX New branched immunomodulatory compound comprising at least three nucleic
 PT acid moieties and at least one branch-point nucleoside, useful for
 PT modulating an immune response in individual suffering e.g. allergy.
 XX
 XX Disclosure; SEQ ID NO 64; 183pp; English.
 PS
 CC The present invention relates to novel branched immunomodulatory
 CC compounds (BIC) comprising at least three nucleic acid moieties, at least
 CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
 CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
 CC e.g. the ability to stimulate interferon (IFN)-gamma production from
 CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
 CC alpha production from human peripheral blood mononuclear cells and the
 CC ability to stimulate B cell proliferation. The BIC compounds are useful
 CC for modulating an immune response in an individual suffering from a
 CC disorder associated with a T helper (Th)2-type immune response e.g.
 CC allergy, allergy-induced asthma or an infectious disease; for increasing
 CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
 CC are also useful for immunomodulation of cells and individuals; in the
 CC fields of biomedicine and immunology; for the manufacture of a medicament
 CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
 CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
 CC ameliorating an IGE-related disorder in an individual. The disorders
 CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
 CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
 CC cancer; infectious disease resistant to humoral immune responses (e.g.
 CC diseases caused by mycobacterial infections and intracellular pathogens,
 CC cellular pathogens e.g. bacteria or protozoans or by subcellular
 CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
 CC leprosy or M. Marium or M. ulcerans infections; herpes viruses; diseases
 CC caused by intracellular parasites such as malaria; leishmaniasis,
 CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
 CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
 CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
 CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.
 XX
 SQ Sequence 10 BP; 2 A; 3 C; 3 G; 2 T; 0 U; 0 Other;
 Query Match 100.0%; Score 10; DB 12; Length 10;
 Best Local Similarity 100.0%; Pred. No. 4.7e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 CGAACGTCG 10
 Db 10 CGAACGTCG 1
 RESULT 13
 ADQ95323
 ID ADQ95323 standard; DNA; 10 BP.
 XX
 AC ADQ95323;
 XX
 XX 07-OCT-2004 (first entry)
 DT
 XX Branched immunomodulatory compound related oligonucleotide, SEQ ID 65.
 DE
 XX Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
 KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
 KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
 KW Tuberculostatic; Antileprotic; Antiparasitic; An-imalarial; Antiulcer;
 KW Gastrointestinal; Nephrotropic; branched immunomodulatory compound;

KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
 XX IFN-alpha; ss.
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 XX modified_base 1 /*tag= a
 FT /mod_base= OTHER
 FT /note= "c= 5-bromocytosine"
 FT modified_base 5
 FT /*tag= b
 FT /mod_base= OTHER
 FT /note= "c= 5-bromocytosine"
 XX
 PN WO2004058159-A2.
 XX
 XX 15-JUL-2004.
 PD
 XX 17-DEC-2003; 2003WO-US040417.
 PF
 XX 23-DEC-2002; 2002US-0436406P.
 PR
 XX (DYNA-) DYNAVAX TECHNOLOGIES CORP.
 PA Fearon KL;
 PI WPI; 2004-561515/54.
 DR
 XX New branched immunomodulatory compound comprising at least three nucleic
 PT acid moieties and at least one branch-point nucleoside, useful for
 PT modulating an immune response in individual suffering e.g. allergy.
 XX
 XX Disclosure; SEQ ID NO 65; 183pp; English.
 PS
 CC The present invention relates to novel branched immunomodulatory
 CC compounds (BIC) comprising at least three nucleic acid moieties, at least
 CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
 CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
 CC e.g. the ability to stimulate interferon (IFN)-gamma production from
 CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
 CC alpha production from human peripheral blood mononuclear cells and the
 CC ability to stimulate B cell proliferation. The BIC compounds are useful
 CC for modulating an immune response in an individual suffering from a
 CC disorder associated with a T helper (Th)2-type immune response e.g.
 CC allergy, allergy-induced asthma or an infectious disease; for increasing
 CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
 CC are also useful for immunomodulation of cells and individuals; in the
 CC fields of biomedicine and immunology; for the manufacture of a medicament
 CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
 CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
 CC ameliorating an IGE-related disorder in an individual. The disorders
 CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
 CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
 CC cancer; infectious disease resistant to humoral immune responses (e.g.
 CC diseases caused by mycobacterial infections and intracellular pathogens,
 CC cellular pathogens e.g. bacteria or protozoans or by subcellular
 CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
 CC leprosy or M. Marium or M. ulcerans infections; herpes viruses; diseases
 CC caused by intracellular parasites such as malaria; leishmaniasis,
 CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
 CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
 CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
 CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.
 XX
 SQ Sequence 10 BP; 2 A; 3 C; 3 G; 1 T; 1 U; 0 Other;
 Query Match 100.0%; Score 10; DB 12; Length 10;
 Best Local Similarity 90.0%; Pred. No. 4.7e+03;
 Matches 9; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
 QY 1 CGAACGTCG 10

```

Db      1 CGAACGUTCG 10
RESULT 14
ADQ95323/c
XX      ADQ95323 standard; DNA; 10 BP.
AC      ADQ95323;
XX      07-OCT-2004 (first entry)
XX      Branched immunomodulatory compound related oligonucleotide, SEQ ID 65.
XX      Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
XX      Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
XX      Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
XX      Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Antiulcer;
XX      Gastrointestinal; Nephrotropic; Branched immunomodulatory compound;
XX      immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
XX      IFN-alpha; ss.
XX      Synthetic.
XX      Key      Location/Qualifiers
FH      modified_base 1 /*tag= a
FT      /mod_base= OTHER
FT      /note= "c= 5-bromocytosine"
FT      modified_base 5
FT      /*tag= b
FT      /mod_base= OTHER
FT      /note= "c= 5-bromocytosine"
XX      WO2004058159-A2.
XX      15-JUL-2004.
XX      17-DEC-2003; 2003WO-US040417.
XX      23-DEC-2002; 2002US-0436406P.
XX      (DYNA-) DYNAVAX TECHNOLOGIES CORP.
XX      Fearon KL;
XX      WPI; 2004-561515/54.
XX      New branched immunomodulatory compound comprising at least three nucleic
XX      acid moieties and at least one branch-point nucleoside, useful for
XX      modulating an immune response in individual suffering e.g. allergy.
XX      Disclosure; SEQ ID NO 65; 183pp; English.
XX      The present invention relates to novel branched immunomodulatory
XX      compounds (BIC) comprising at least three nucleic acid moieties, at least
XX      one of which comprises the nucleotide sequence 5'-CG-3', and at least one
XX      branch-point nucleoside. The BIC compounds has immunomodulatory activity
XX      e.g. the ability to stimulate interferon (IFN)-gamma production from
XX      human peripheral blood mononuclear cells, the ability to stimulate IFN-
XX      alpha production from human peripheral blood mononuclear cells and the
XX      ability to stimulate B cell proliferation. The BIC compounds are useful
XX      for modulating an immune response in an individual suffering from a
XX      disorder associated with a T helper (Th)2-type immune response e.g.
XX      allergy, allergy-induced asthma or an infectious disease; for increasing
XX      secretion of IFN-gamma by blood cells in an individual. The BIC compounds
XX      are also useful for immunomodulation of cells and individuals; in the
XX      fields of biomedicine and immunology; for the manufacture of a medicament
XX      ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
XX      hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
XX      ameliorating an Igs-related disorder in an individual. The disorders
XX      includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
XX      eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;

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CC      cancer; infectious disease resistant to humoral immune responses (e.g.
CC      diseases caused by mycobacterial infections and intracellular pathogens,
CC      cellular pathogens e.g. bacteria or protozoans or by subcellular
CC      pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
CC      leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases
CC      caused by intracellular parasites such as malaria; leishmaniasis,
CC      toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
CC      disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
CC      induced fibrosis, hepatic fibrosis including schistosomiasis-induced
CC      hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
CC      the BIC compounds of the invention.
XX      Sequence 10 BP; 2 A; 3 C; 3 G; 1 T; 1 U; 0 Other;
XX      Query Match      100.0%; Score 10; DB 12; Length 10;
XX      Best Local Similarity 100.0%; Pred. No. 4.7e+03;
XX      Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy      1 CGAACGUTCG 10
Db      10 CGAACGUTCG 1
RESULT 15
ADQ95277
XX      ADQ95277 standard; DNA; 10 BP.
XX      AC      ADQ95277;
XX      DT      07-OCT-2004 (first entry)
XX      DE      Branched immunomodulatory compound related oligonucleotide, SEQ ID 19.
XX      KW      Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
XX      KW      Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
XX      KW      Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
XX      KW      Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Antiulcer;
XX      KW      Gastrointestinal; Nephrotropic; Branched immunomodulatory compound;
XX      KW      immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
XX      KW      IFN-alpha; ss.
XX      OS      Synthetic.
XX      Key      Location/Qualifiers
FH      modified_base 1 /*tag= a
FT      /mod_base= OTHER
FT      /note= "c= 5-bromocytosine"
FT      modified_base 5
FT      /*tag= b
FT      /mod_base= OTHER
FT      /note= "c= 5-bromocytosine"
XX      WO2004058159-A2.
XX      15-JUL-2004.
XX      17-DEC-2003; 2003WO-US040417.
XX      23-DEC-2002; 2002US-0436406P.
XX      (DYNA-) DYNAVAX TECHNOLOGIES CORP.
XX      Fearon KL;
XX      WPI; 2004-561515/54.
XX      New branched immunomodulatory compound comprising at least three nucleic
XX      acid moieties and at least one branch-point nucleoside, useful for
XX      modulating an immune response in individual suffering e.g. allergy.
XX      Disclosure; SEQ ID NO 65; 183pp; English.
XX      The present invention relates to novel branched immunomodulatory
XX      compounds (BIC) comprising at least three nucleic acid moieties, at least
XX      one of which comprises the nucleotide sequence 5'-CG-3', and at least one
XX      branch-point nucleoside. The BIC compounds has immunomodulatory activity
XX      e.g. the ability to stimulate interferon (IFN)-gamma production from
XX      human peripheral blood mononuclear cells, the ability to stimulate IFN-
XX      alpha production from human peripheral blood mononuclear cells and the
XX      ability to stimulate B cell proliferation. The BIC compounds are useful
XX      for modulating an immune response in an individual suffering from a
XX      disorder associated with a T helper (Th)2-type immune response e.g.
XX      allergy, allergy-induced asthma or an infectious disease; for increasing
XX      secretion of IFN-gamma by blood cells in an individual. The BIC compounds
XX      are also useful for immunomodulation of cells and individuals; in the
XX      fields of biomedicine and immunology; for the manufacture of a medicament
XX      ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
XX      hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
XX      ameliorating an Igs-related disorder in an individual. The disorders
XX      includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
XX      eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;

```

e.g. the ability to stimulate interferon (IFN)-gamma production from human peripheral blood mononuclear cells, the ability to stimulate IFN-alpha production from human peripheral blood mononuclear cells and the ability to stimulate B cell proliferation. The BIC compounds are useful for modulating an immune response in an individual suffering from a disorder associated with a T helper (Th)2-type immune response e.g. allergy, allergy-induced asthma or an infectious disease; for increasing secretion of IFN-gamma by blood cells in an individual. The BIC compounds are also useful for immunomodulation of cells and individuals; in the fields of biomedicine and immunology; for the manufacture of a medicament ; for treating idiopathic pulmonary fibrosis, viral infection (e.g. hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for ameliorating an IGE-related disorder in an individual. The disorders includes atopic dermatitis, eosinophilic gastrointestinal inflammation, eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis; diseases caused by mycobacterial infections and intracellular pathogens, cellular pathogens e.g. bacteria or protozoans or by subcellular pathogens e.g. viruses; mycobacterial diseases such as tuberculosis, leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases caused by intracellular parasites such as malaria; leishmaniasis, toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-induced fibrosis, hepatic fibrosis including schistosomiasis-induced hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in the BIC compounds of the invention.

XX Sequence 10 BP; 2 A; 3 C; 3 G; 2 T; 0 U; 0 Other;

Query Match 100.0%; Score 10; DB 12; Length 10;

Best Local Similarity 100.0%; Pred. No. 4.7e+03;

Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10

Db 1 CGAACGTTTCG 10

RESULT 16

ADQ95277/c

ID ADQ95277 standard; DNA; 10 BP.

XX ADQ95277;

DT 07-OCT-2004 (first entry)

XX Branched immunomodulatory compound related oligonucleotide, SEQ ID 19.

KW Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
 KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
 KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
 KW Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Antiulcer;
 KW Gastrointestinal; Nephrotropic; branched immunomodulatory compound;
 KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
 KW IFN-alpha; ss.

XX Synthetic.

XX Key Location/Qualifiers

FT modified_base 1

FT /*tag= a

FT /mod_base= OTHER

FT /note= "C= 5-bromocytosine"

XX WO2004058159-A2.

XX 15-JUL-2004.

XX 17-DEC-2003; 2003WO-US040417.

XX 23-DEC-2002; 2002US-0436406P.

XX (DYNA-) DYNVAX TECHNOLOGIES CORP.

XX Fearon KL;

DR WPI; 2004-561515/54.

XX New branched immunomodulatory compound comprising at least three nucleic acid moieties and at least one branch-point nucleoside, useful for modulating an immune response in individual suffering e.g. allergy.

XX Disclosure; SEQ ID NO 19; 183pp; English.

XX The present invention relates to novel branched immunomodulatory compounds (BIC) comprising at least three nucleic acid moieties, at least one of which comprises the nucleotide sequence 5'-CG-3', and at least one branch-point nucleoside. The BIC compounds has immunomodulatory activity e.g. the ability to stimulate interferon (IFN)-gamma production from human peripheral blood mononuclear cells, the ability to stimulate IFN-alpha production from human peripheral blood mononuclear cells and the ability to stimulate B cell proliferation. The BIC compounds are useful for modulating an immune response in an individual suffering from a disorder associated with a T helper (Th)2-type immune response e.g. allergy, allergy-induced asthma or an infectious disease; for increasing secretion of IFN-gamma by blood cells in an individual. The BIC compounds are also useful for immunomodulation of cells and individuals; in the fields of biomedicine and immunology; for the manufacture of a medicament ; for treating idiopathic pulmonary fibrosis, viral infection (e.g. hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for ameliorating an IGE-related disorder in an individual. The disorders includes atopic dermatitis, eosinophilic gastrointestinal inflammation, eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis; cancer; infectious disease resistant to humoral immune responses (e.g. diseases caused by mycobacterial infections and intracellular pathogens, cellular pathogens e.g. bacteria or protozoans or by subcellular pathogens e.g. viruses; mycobacterial diseases such as tuberculosis, leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases caused by intracellular parasites such as malaria; leishmaniasis, toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-induced fibrosis, hepatic fibrosis including schistosomiasis-induced hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in the BIC compounds of the invention.

XX Sequence 10 BP; 2 A; 3 C; 3 G; 2 T; 0 U; 0 Other;

Query Match 100.0%; Score 10; DB 12; Length 10;

Best Local Similarity 100.0%; Pred. No. 4.7e+03;

Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10

Db 10 CGAACGTTTCG 1

RESULT 17

ADQ95275

ID ADQ95275 standard; DNA; 10 BP.

XX ADQ95275;

XX 07-OCT-2004 (first entry)

XX Branched immunomodulatory compound related oligonucleotide, SEQ ID 17.

XX Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
 KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
 KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
 KW Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Antiulcer;
 KW Gastrointestinal; Nephrotropic; branched immunomodulatory compound;
 KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
 KW IFN-alpha; ss.
 XX Synthetic.

PN WO2004058159-A2.
 PD 15-JUL-2004.
 PF 17-DEC-2003; 2003WO-US040417.
 PR 23-DEC-2002; 2002US-0436406P.
 XX
 PA (DYNA-) DYNAVAX TECHNOLOGIES CORP.
 XX Fearon KL;
 XX WPI; 2004-561515/54.
 DR
 XX
 PT New branched immunomodulatory compound comprising at least three nucleic
 PT acid moieties and at least one branch-point nucleoside, useful for
 PT modulating an immune response in individual suffering e.g. allergy.
 XX
 XX Disclosure; SEQ ID NO 17; 183pp; English.
 XX
 CC The present invention relates to novel branched immunomodulatory
 CC compounds (BIC) comprising at least three nucleic acid moieties, at least
 CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
 CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
 CC e.g. the ability to stimulate interferon (IFN)-gamma production from
 CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
 CC alpha production from human peripheral blood mononuclear cells and the
 CC ability to stimulate B cell proliferation. The BIC compounds are useful
 CC for modulating an immune response in an individual suffering from a
 CC disorder associated with a T helper (Th)2-type immune response e.g.
 CC allergy, allergy-induced asthma or an infectious disease; for increasing
 CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
 CC are also useful for immunomodulation of cells and individuals; in the
 CC fields of biomedicine and immunology; for the manufacture of a medicament
 CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
 CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
 CC ameliorating an Igs-related disorder in an individual. The disorders
 CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
 CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
 CC cancer; infectious disease resistant to humoral immune responses (e.g.
 CC diseases caused by mycobacterial infections and intracellular pathogens,
 CC cellular pathogens e.g. bacteria or protozoans or by subcellular
 CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
 CC leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases
 CC caused by intracellular parasites such as malaria; leishmaniasis,
 CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
 CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
 CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
 CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.
 XX
 SQ Sequence 10 BP; 2 A; 3 C; 3 G; 2 T; 0 U; 0 Other;
 Query Match 100.0%; Score 10; DB 12; Length 10;
 Best Local Similarity 100.0%; Pred. No. 4.7e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 CGAACGTTTCG 10
 |||||
 Db 1 CGAACGTTTCG 10
 |||||
 RESULT 18
 ADQ95275/C
 ID ADQ95275 standard; DNA; 10 BP.
 XX
 AC ADQ95275;
 XX
 XX 07-OCT-2004 (first entry)
 DT
 XX Branched immunomodulatory compound related oligonucleotide, SEQ ID 17.
 DE
 XX Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;

KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
 KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
 KW Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Antitumor;
 KW Gastrointestinal; Nephrotropic; branched immunomodulatory compound;
 KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
 XX IFN-alpha; ss.
 OS Synthetic.
 XX
 XX WO2004058159-A2.
 PN
 XX
 PD 15-JUL-2004.
 XX
 XX 17-DEC-2003; 2003WO-US040417.
 PF
 XX 23-DEC-2002; 2002US-0436406P.
 PR
 XX (DYNA-) DYNAVAX TECHNOLOGIES CORP.
 PA
 XX Fearon KL;
 PI
 XX WPI; 2004-561515/54.
 DR
 XX
 PT New branched immunomodulatory compound comprising at least three nucleic
 PT acid moieties and at least one branch-point nucleoside, useful for
 PT modulating an immune response in individual suffering e.g. allergy.
 XX
 XX Disclosure; SEQ ID NO 17; 183pp; English.
 XX
 CC The present invention relates to novel branched immunomodulatory
 CC compounds (BIC) comprising at least three nucleic acid moieties, at least
 CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
 CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
 CC e.g. the ability to stimulate interferon (IFN)-gamma production from
 CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
 CC alpha production from human peripheral blood mononuclear cells and the
 CC ability to stimulate B cell proliferation. The BIC compounds are useful
 CC for modulating an immune response in an individual suffering from a
 CC disorder associated with a T helper (Th)2-type immune response e.g.
 CC allergy, allergy-induced asthma or an infectious disease; for increasing
 CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
 CC are also useful for immunomodulation of cells and individuals; in the
 CC fields of biomedicine and immunology; for the manufacture of a medicament
 CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
 CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
 CC ameliorating an Igs-related disorder in an individual. The disorders
 CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
 CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
 CC cancer; infectious disease resistant to humoral immune responses (e.g.
 CC diseases caused by mycobacterial infections and intracellular pathogens,
 CC cellular pathogens e.g. bacteria or protozoans or by subcellular
 CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
 CC leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases
 CC caused by intracellular parasites such as malaria; leishmaniasis,
 CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
 CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
 CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
 CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.
 XX
 SQ Sequence 10 BP; 2 A; 3 C; 3 G; 2 T; 0 U; 0 Other;
 Query Match 100.0%; Score 10; DB 12; Length 10;
 Best Local Similarity 100.0%; Pred. No. 4.7e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 CGAACGTTTCG 10
 |||||
 Db 10 CGAACGTTTCG 1
 |||||
 RESULT 19
 ABQ75229

ID ABQ75229 standard; DNA; 11 BP.
XX AC
XX ABQ75229;
XX DT
XX 05-NOV-2002 (first entry)
XX DE
XX ISS immunomodulatory oligonucleotide SEQ ID NO:102.
XX KW
XX Immunostimulatory sequence; ISS: immunomodulatory; immune response;
KW allergy; asthma; infectious disease; interferon-gamma; IFN-gamma;
KW idiopathic pulmonary fibrosis; viral infection; mycobacterial disease;
KW malaria; leishmaniasis; toxoplasmosis; schistosomiasis; clonorchiasis;
KW immunoglobulin E; IgE-related disorder; antiallergic; antiasthmatic;
KW virucide; antibacterial; protozoacide; ss.
XX OS
XX Synthetic.
XX WO200252002-A2.
XX PN
XX 04-JUL-2002.
XX PD
XX 27-DEC-2001; 2001WO-US050821.
XX PF
XX 27-DEC-2000; 2000US-0258675P.
XX PR
XX (DYNA-) DYNAVAX TECHNOLOGIES CORP.
XX PA
XX Fearon KL, Dina D;
XX PI
XX WPI; 2002-657426/70.
XX DR
XX Immunomodulatory polynucleotide for modulating an immune response in a
PT subject suffering from disorders associated with Th2-type immune
PT response, e.g. allergy, or infectious disease, comprises an
PT immunostimulatory sequence.
XX PT
XX Disclosure; Page 24; 95pp; English.
XX PS
XX The present invention describes an immunomodulatory polynucleotide (I)
CC comprising an immunostimulatory sequence (ISS). Also described: (1) an
CC immunomodulatory composition comprising (I); (2) an immunomodulatory
CC polynucleotide/microcarrier (IMP/MC) complex, comprising (I) linked to a
CC biodegradable MC, where the MC is less than 10 micrometre in size; and
CC (3) a kit comprising (I). (I) has antiallergic, antiasthmatic, virucide,
CC antibacterial and protozoacide activities, and can be used as a modulator
CC of immune response. (I) is useful for modulating an immune response in an
CC individual suffering from disorders associated with a Th2-type immune
CC response, especially an allergy or asthma, or an infectious disease. (I)
CC is also useful for increasing interferon-gamma (IFN-gamma) in an
CC individual having idiopathic pulmonary fibrosis, or IFN-alpha in an
CC individual having a viral infection. (I) is further useful for
CC ameliorating a symptom of an infectious disease caused by a cellular
CC pathogen such as mycobacterial disease, malaria, leishmaniasis,
CC toxoplasmosis, schistosomiasis and clonorchiasis in an individual, or a
CC symptom of an immunoglobulin E (IgE)-related disorder, preferably an
CC allergy-related disorder, in particular asthma in an individual. The
CC present sequence represents an immunomodulatory oligonucleotide from the
CC present invention
XX CC
SQ Sequence 11 BP; 2 A; 3 C; 3 G; 3 T; 0 U; 0 Other;
Query Match 100.0%; Score 10; DB 6; Length 11;
Best Local Similarity 100.0%; Pred. No. 4.7e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 CGAACGTTTCG 10
|||||
Db 2 CGAACGTTTCG 11
RESULT 20
ABQ75229/c
.ID ABQ75229 standard; DNA; 11 BP.

XX ABQ75229;
XX AC
XX DT
XX 05-NOV-2002 (first entry)
XX DE
XX ISS immunomodulatory oligonucleotide SEQ ID NO:102.
XX KW
XX Immunostimulatory sequence; ISS: immunomodulatory; immune response;
KW allergy; asthma; infectious disease; interferon-gamma; IFN-gamma;
KW idiopathic pulmonary fibrosis; viral infection; mycobacterial disease;
KW malaria; leishmaniasis; toxoplasmosis; schistosomiasis; clonorchiasis;
KW immunoglobulin E; IgE-related disorder; antiallergic; antiasthmatic;
KW virucide; antibacterial; protozoacide; ss.
XX OS
XX Synthetic.
XX WO200252002-A2.
XX PN
XX 04-JUL-2002.
XX PD
XX 27-DEC-2001; 2001WO-US050821.
XX PF
XX 27-DEC-2000; 2000US-0258675P.
XX PR
XX (DYNA-) DYNAVAX TECHNOLOGIES CORP.
XX PA
XX Fearon KL, Dina D;
XX PI
XX WPI; 2002-657426/70.
XX DR
XX Immunomodulatory polynucleotide for modulating an immune response in a
PT subject suffering from disorders associated with Th2-type immune
PT response, e.g. allergy, or infectious disease, comprises an
PT immunostimulatory sequence.
XX PT
XX Disclosure; Page 24; 95pp; English.
XX PS
XX The present invention describes an immunomodulatory polynucleotide (I)
CC comprising an immunostimulatory sequence (ISS). Also described: (1) an
CC immunomodulatory composition comprising (I); (2) an immunomodulatory
CC polynucleotide/microcarrier (IMP/MC) complex, comprising (I) linked to a
CC biodegradable MC, where the MC is less than 10 micrometre in size; and
CC (3) a kit comprising (I). (I) has antiallergic, antiasthmatic, virucide,
CC antibacterial and protozoacide activities, and can be used as a modulator
CC of immune response. (I) is useful for modulating an immune response in an
CC individual suffering from disorders associated with a Th2-type immune
CC response, especially an allergy or asthma, or an infectious disease. (I)
CC is also useful for increasing interferon-gamma (IFN-gamma) in an
CC individual having idiopathic pulmonary fibrosis, or IFN-alpha in an
CC individual having a viral infection. (I) is further useful for
CC ameliorating a symptom of an infectious disease caused by a cellular
CC pathogen such as mycobacterial disease, malaria, leishmaniasis,
CC toxoplasmosis, schistosomiasis and clonorchiasis in an individual, or a
CC symptom of an immunoglobulin E (IgE)-related disorder, preferably an
CC allergy-related disorder, in particular asthma in an individual. The
CC present sequence represents an immunomodulatory oligonucleotide from the
CC present invention
XX CC
SQ Sequence 11 BP; 2 A; 3 C; 3 G; 3 T; 0 U; 0 Other;
Query Match 100.0%; Score 10; DB 6; Length 11;
Best Local Similarity 100.0%; Pred. No. 4.7e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 CGAACGTTTCG 10
|||||
Db 11 CGAACGTTTCG 2
RESULT 21
ADB88900
ID ADB88900 standard; DNA; 11 BP.
XX

AC ADB88900;
 XX 04-DEC-2003 (first entry)
 XX Chimeric immunomodulatory compound DNA sequence, SEQ ID No 103.
 DE
 XX chimeric immunomodulatory compound; CIC; immunomodulatory activity;
 KW spacer moiety; linear hexaethylene glycol structure; HEG; immune;
 KW Th2-type; allergy; allergy-induced asthma; infectious disease; IFN-gamma;
 KW IFN-alpha; idiopathic pulmonary fibrosis; viral infection; ameliorating;
 KW immunoglobulin E; IgE; allergy; cancer;
 KW stimulating cellular immune system cell; ss.
 XX
 OS Synthetic.
 XX WO2003000922-A2.
 XX 03-JAN-2003.
 XX 21-JUN-2002; 2002WO-US020025.
 XX 21-JUN-2001; 2001US-0299883P.
 XX 23-APR-2002; 2002US-0375253P.
 XX (DYNA-) DYNAVAX TECHNOLOGIES CORP.
 XX Fearon KL, Dina D, Tuck SF;
 XX WPI; 2003-210159/20.
 XX Novel chimeric immunomodulatory compound having immunomodulatory
 PT activity, useful for modulating an immune response and for treating
 PT cancer, has nucleic acid moieties and non-nucleic acid spacer moieties.
 XX
 PS Disclosure; Page 36; 224pp; English.
 XX The invention relates to a novel chimeric immunomodulatory compound (CIC)
 CC having immunomodulatory activity, comprising two or more nucleic acid
 CC moieties and one or more non-nucleic acid spacer moieties, where at least
 CC one non-nucleic acid spacer moiety is covalently joined to two nucleic
 CC acid moieties, where the spacer is not a polypeptide, and at least one
 CC nucleic acid moiety comprises the sequence 5'-CG-3'. The chimeric
 CC immunomodulatory compounds more specifically contain the nucleic acid
 CC spacer moieties of linear hexaethylene glycol structure (HEG) subunits.
 CC CIC's are useful for modulating an immune response in an individual,
 CC where the individual suffers from a disorder associated with a Th2-type
 CC immune response which is an allergy or allergy-induced asthma, and an
 CC infectious disease. CIC is also useful for increasing IFN-gamma, or IFN-
 CC alpha; in an individual, where the individual has idiopathic pulmonary
 CC fibrosis, or a viral infection. CIC's are useful for ameliorating a
 CC symptom of an infectious disease, or an immunoglobulin E (IgE)-related
 CC disorder in an individual, where the IgE-related disorder is allergy, or
 CC an allergy-related disorder. CIC's are also useful for treating cancer
 CC and can be used for stimulating cellular immune system cells production
 CC in an individual. This polynucleotide sequence represents a DNA sequence
 CC which is a nucleic acid moiety part of a chimeric immunomodulatory compound
 CC of the invention.
 XX
 SQ Sequence 11 BP; 2 A; 3 C; 3 G; 3 T; 0 U; 0 Other;
 Query Match 100.0%; Score 10; DB 9; Length 11;
 Best Local Similarity 100.0%; Pred. No. 4.7e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 CGAACGTTTCG 10
 Db 2 CGAACGTTTCG 11
 RESULT 22
 ADB88900/c
 ID ADB88900 standard; DNA; 11 BP.
 XX

AC ADB88900;
 XX 04-DEC-2003 (first entry)
 XX Chimeric immunomodulatory compound DNA sequence, SEQ ID No 103.
 DE
 XX chimeric immunomodulatory compound; CIC; immunomodulatory activity;
 KW spacer moiety; linear hexaethylene glycol structure; HEG; immune;
 KW Th2-type; allergy; allergy-induced asthma; infectious disease; IFN-gamma;
 KW IFN-alpha; idiopathic pulmonary fibrosis; viral infection; ameliorating;
 KW immunoglobulin E; IgE; allergy; cancer;
 KW stimulating cellular immune system cell; ss.
 XX
 OS Synthetic.
 XX WO2003000922-A2.
 XX 03-JAN-2003.
 XX 21-JUN-2002; 2002WO-US020025.
 XX 21-JUN-2001; 2001US-0299883P.
 XX 23-APR-2002; 2002US-0375253P.
 XX (DYNA-) DYNAVAX TECHNOLOGIES CORP.
 XX Fearon KL, Dina D, Tuck SF;
 XX WPI; 2003-210159/20.
 XX Novel chimeric immunomodulatory compound having immunomodulatory
 PT activity, useful for modulating an immune response and for treating
 PT cancer, has nucleic acid moieties and non-nucleic acid spacer moieties.
 XX
 PS Disclosure; Page 36; 224pp; English.
 XX The invention relates to a novel chimeric immunomodulatory compound (CIC)
 CC having immunomodulatory activity, comprising two or more nucleic acid
 CC moieties and one or more non-nucleic acid spacer moieties, where at least
 CC one non-nucleic acid spacer moiety is covalently joined to two nucleic
 CC acid moieties, where the spacer is not a polypeptide, and at least one
 CC nucleic acid moiety comprises the sequence 5'-CG-3'. The chimeric
 CC immunomodulatory compounds more specifically contain the nucleic acid
 CC spacer moieties of linear hexaethylene glycol structure (HEG) subunits.
 CC CIC's are useful for modulating an immune response in an individual,
 CC where the individual suffers from a disorder associated with a Th2-type
 CC immune response which is an allergy or allergy-induced asthma, and an
 CC infectious disease. CIC is also useful for increasing IFN-gamma, or IFN-
 CC alpha; in an individual, where the individual has idiopathic pulmonary
 CC fibrosis, or a viral infection. CIC's are useful for ameliorating a
 CC symptom of an infectious disease, or an immunoglobulin E (IgE)-related
 CC disorder in an individual, where the IgE-related disorder is allergy, or
 CC an allergy-related disorder. CIC's are also useful for treating cancer
 CC and can be used for stimulating cellular immune system cells production
 CC in an individual. This polynucleotide sequence represents a DNA sequence
 CC which is a nucleic acid moiety part of a chimeric immunomodulatory compound
 CC of the invention.
 XX
 SQ Sequence 11 BP; 2 A; 3 C; 3 G; 3 T; 0 U; 0 Other;
 Query Match 100.0%; Score 10; DB 9; Length 11;
 Best Local Similarity 100.0%; Pred. No. 4.7e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 CGAACGTTTCG 10
 Db 11 CGAACGTTTCG 2
 RESULT 23
 ADQ95385
 ID ADQ95385 standard; DNA; 11 BP.
 XX

CC ameliorating an Ige-related disorder in an individual. The disorders
 CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
 CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
 CC cancer; infectious disease resistant to humoral immune responses (e.g.
 CC diseases caused by mycobacterial infections and intracellular pathogens,
 CC cellular pathogens e.g. bacteria or protozoans or by subcellular
 CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
 CC leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases
 CC caused by intracellular parasites such as schistosomiasis; diseases
 CC toxoplasmosis; parasitic diseases such as malaria; leishmaniasis,
 CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
 CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
 CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.

XX SQ Sequence 11 BP; 2 A; 3 C; 3 G; 3 T; 0 U; 0 Other;
 Query Match 100.0%; Score 10; DB 12; Length 11;
 Best Local Similarity 100.0%; Pred. No. 4.7e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
 |||||
 Db 11 CGAACGTTTCG 2

RESULT 25
 ADQ95388 standard; DNA; 11 BP.
 XX AC ADQ95388;
 XX 07-OCT-2004 (first entry)
 XX Branched immunomodulatory compound related oligonucleotide, SEQ ID 130.

XX Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
 KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
 KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
 KW Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Antiulcer;
 KW Gastrointestinal; Nephrotropic; branched immunomodulatory compound,
 KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
 KW IFN-alpha; ss.
 XX Synthetic.

XX Key Location/Qualifiers
 FT modified_base 2 /*tag= a
 FT /mod_base= OTHER
 FT /note= "C= 5-bromocytosine"
 FT modified_base 6
 FT /*tag= b
 FT /mod_base= OTHER

XX WO2004058159-A2.
 XX 15-JUL-2004.
 XX 17-DEC-2003; 2003WO-US040417.
 XX 23-DEC-2002; 2002US-0436406P.
 XX (DYNA-) DYNAVAX TECHNOLOGIES CORP.
 XX Fearon KL;
 XX WPI; 2004-561515/54.
 XX New branched immunomodulatory compound comprising at least three nucleic
 PT acid moieties and at least one branch-point nucleoside, useful for
 PT modulating an immune response in individual suffering e.g. allergy.

XX Disclosure; SEQ ID NO 130; 183pp; English.
 XX The present invention relates to novel branched immunomodulatory
 CC compounds (BIC) comprising at least three nucleic acid moieties, at least
 CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
 CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
 CC e.g. the ability to stimulate interferon (IFN)-gamma production from
 CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
 CC alpha production from human peripheral blood mononuclear cells and the
 CC ability to stimulate B cell proliferation. The BIC compounds are useful
 CC for modulating an immune response in an individual suffering from a
 CC disorder associated with a T helper (Th)2-type immune response e.g.
 CC allergy, allergy-induced asthma or an infectious disease; for increasing
 CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
 CC are also useful for immunomodulation of cells and individuals; in the
 CC fields of biomedicine and immunology; for the manufacture of a medicament
 CC for treating idiopathic pulmonary fibrosis, viral infection (e.g.
 CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
 CC ameliorating an Ige-related disorder in an individual. The disorders
 CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
 CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
 CC cancer; infectious disease resistant to humoral immune responses (e.g.
 CC diseases caused by mycobacterial infections and intracellular pathogens,
 CC cellular pathogens e.g. bacteria or protozoans or by subcellular
 CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
 CC leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases
 CC caused by intracellular parasites such as malaria; leishmaniasis,
 CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
 CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
 CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
 CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.

XX SQ Sequence 11 BP; 2 A; 3 C; 3 G; 3 T; 0 U; 0 Other;
 Query Match 100.0%; Score 10; DB 12; Length 11;
 Best Local Similarity 100.0%; Pred. No. 4.7e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
 |||||
 Db 2 CGAACGTTTCG 11

RESULT 26
 ADQ95388/c
 ID ADQ95388 standard; DNA; 11 BP.
 XX AC ADQ95388;
 XX 07-OCT-2004 (first entry)
 XX Branched immunomodulatory compound related oligonucleotide, SEQ ID 130.

XX Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
 KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
 KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
 KW Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Antiulcer;
 KW Gastrointestinal; Nephrotropic; branched immunomodulatory compound,
 KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
 KW IFN-alpha; ss.
 XX Synthetic.

XX Key Location/Qualifiers
 FT modified_base 2 /*tag= a
 FT /mod_base= OTHER
 FT /note= "C= 5-bromocytosine"
 FT modified_base 6
 FT /*tag= b
 FT /mod_base= OTHER

FT XX /note= "c= 5-bromocytosine"

PN WO2004058159-A2.

XX KW

PD 15-JUL-2004.

XX KW

PF 17-DEC-2003; 2003WO-US040417.

XX KW

PR 23-DEC-2002; 2002US-0436406P.

XX KW

PA (DYNA-) DYNAVAX TECHNOLOGIES CORP.

PI Fearon Kl;

XX WI; 2004-561515/54.

DR XX

XX New branched immunomodulatory compound comprising at least three nucleic acid moieties and at least one branch-point nucleoside, useful for modulating an immune response in individual suffering e.g. allergy.

PT PT

PT PT

PT PT

XX PS Disclosure; SEQ ID NO 130; 183pp; English.

XX CC

CC The present invention relates to novel branched immunomodulatory compounds (BIC) comprising at least three nucleic acid moieties, at least one of which comprises the nucleotide sequence 5'-CG-3', and at least one branch-point nucleoside. The BIC compounds has immunomodulatory activity e.g. the ability to stimulate interferon (IFN)-gamma production from human peripheral blood mononuclear cells, the ability to stimulate IFN-alpha production from human peripheral blood mononuclear cells and the ability to stimulate B cell proliferation. The BIC compounds are useful for modulating an immune response in an individual suffering from a disorder associated with a T helper (Th)2-type immune response e.g. allergy, allergy-induced asthma or an infectious disease; for increasing secretion of IFN-gamma by blood cells in an individual. The BIC compounds are also useful for immunomodulation of cells and individuals; in the fields of biomedicine and immunology; for the manufacture of a medicament ; for treating idiopathic pulmonary fibrosis, viral infection (e.g. hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for ameliorating an Igs-related disorder in an individual. The disorders includes atopic dermatitis, eosinophilic gastrointestinal inflammation, eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis; cancer; infectious disease resistant to humoral immune responses (e.g. diseases caused by mycobacterial infections and intracellular pathogens, cellular pathogens e.g. bacteria or protozoans or by subcellular pathogens e.g. viruses); mycobacterial diseases such as tuberculosis, leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases caused by intracellular parasites such as malaria; leishmaniasis, toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-induced fibrosis, hepatic fibrosis including schistosomiasis-induced hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in the BIC compounds of the invention.

XX SQ Sequence 11 BP; 2 A; 3 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 100.0%; Score 10; DB 12; Length 11;

Best Local Similarity 100.0%; Pred. No. 4.7e+03;

Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10

Db 11 CGAACGTTTCG 2

RESULT 27

ADQ95361

ID ADQ95361 standard; DNA; 11 BP.

XX AC

AC ADQ95361;

XX DT

DT 07-OCT-2004 (first entry)

XX DE Branched immunomodulatory compound related oligonucleotide, SEQ ID 103.

XX KW Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory; Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory; Dermatological; Immunosuppressive; Cytostatic; Protozoacide; Tuberculosis; Antileprotic; Antiparasitic; Antimalarial; Antiulcer; Gastrointestinal; Nephrotropic; Branched immunomodulatory compound; Immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha; IFN-alpha; ss.

XX OS Synthetic.

XX KW WO2004058159-A2.

XX PN

XX PD 15-JUL-2004.

XX KW

PF 17-DEC-2003; 2003WO-US040417.

XX KW

PR 23-DEC-2002; 2002US-0436406P.

XX KW

PA (DYNA-) DYNAVAX TECHNOLOGIES CORP.

XX KW

PI Fearon Kl;

XX WI; 2004-561515/54.

DR XX

XX New branched immunomodulatory compound comprising at least three nucleic acid moieties and at least one branch-point nucleoside, useful for modulating an immune response in individual suffering e.g. allergy.

PT PT

PT PT

PT PT

XX PS Disclosure; SEQ ID NO 103; 183pp; English.

XX CC

CC The present invention relates to novel branched immunomodulatory compounds (BIC) comprising at least three nucleic acid moieties, at least one of which comprises the nucleotide sequence 5'-CG-3', and at least one branch-point nucleoside. The BIC compounds has immunomodulatory activity e.g. the ability to stimulate interferon (IFN)-gamma production from human peripheral blood mononuclear cells, the ability to stimulate IFN-alpha production from human peripheral blood mononuclear cells and the ability to stimulate B cell proliferation. The BIC compounds are useful for modulating an immune response in an individual suffering from a disorder associated with a T helper (Th)2-type immune response e.g. allergy, allergy-induced asthma or an infectious disease; for increasing secretion of IFN-gamma by blood cells in an individual. The BIC compounds are also useful for immunomodulation of cells and individuals; in the fields of biomedicine and immunology; for the manufacture of a medicament ; for treating idiopathic pulmonary fibrosis, viral infection (e.g. hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for ameliorating an Igs-related disorder in an individual. The disorders includes atopic dermatitis, eosinophilic gastrointestinal inflammation, eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis; cancer; infectious disease resistant to humoral immune responses (e.g. diseases caused by mycobacterial infections and intracellular pathogens, cellular pathogens e.g. bacteria or protozoans or by subcellular pathogens e.g. viruses); mycobacterial diseases such as tuberculosis, leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases caused by intracellular parasites such as malaria; leishmaniasis, toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-induced fibrosis, hepatic fibrosis including schistosomiasis-induced hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in the BIC compounds of the invention.

XX SQ Sequence 11 BP; 2 A; 3 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 100.0%; Score 10; DB 12; Length 11;

Best Local Similarity 100.0%; Pred. No. 4.7e+03;

Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10

Db 2 CGAACGTTTCG 11

RESULT 28
ADQ95361/C
ID ADQ95361 standard; DNA; 11 BP.
XX
AC ADQ95361;
XX
DT 07-OCT-2004 (first entry)
XX
DE Branched immunomodulatory compound related oligonucleotide, SEQ ID 103.
XX
KW Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
KW Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Antiulcer;
KW Gastrointestinal; Nephrotropic; branched immunomodulatory compound;
KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
KW IFN-alpha; ss.
XX
OS Synthetic.
XX
PN WO2004058159-A2.
XX
PD 15-JUL-2004.
XX
PF 17-DEC-2003; 2003WO-US040417.
XX
PR 23-DEC-2002; 2002US-0436406P.
XX
PA (DYNA-) DYNAVAX TECHNOLOGIES CORP.
XX
PI Fearon KL;
XX
DR WPI; 2004-561515/54.
XX
PT New branched immunomodulatory compound comprising at least three nucleic
PT acid moieties and at least one branch-point nucleoside, useful for
PT modulating an immune response in individual suffering e.g. allergy.
XX
PS Disclosure; SEQ ID NO 103; 183pp; English.
XX
CC The present invention relates to novel branched immunomodulatory
CC compounds (BIC) comprising at least three nucleic acid moieties, at least
CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
CC e.g. the ability to stimulate interferon (IFN)-gamma production from
CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
CC alpha production from human peripheral blood mononuclear cells and the
CC ability to stimulate B cell proliferation. The BIC compounds are useful
CC for modulating an immune response in an individual suffering from a
CC disorder associated with a T helper (Th)2-type immune response e.g.
CC allergy, allergy-induced asthma or an infectious disease; for increasing
CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
CC are also useful for immunomodulation of cells and individuals; in the
CC fields of biomedicine and immunology; for the manufacture of a medicament
CC for treating idiopathic pulmonary fibrosis, viral infection (e.g.
CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
CC ameliorating an IGE-related disorder in an individual. The disorders
CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
CC caused by intracellular parasites such as malaria; leishmaniasis,
CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
CC the BIC compounds of the invention.

XX
SQ Sequence 11 BP; 2 A; 3 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 100.0%; Score 10; DB 12; Length 11;
Best Local Similarity 100.0%; Pred. NO. 4.7e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 CGAACGTTTCG 10
DB 11 CGAACGTTTCG 2
RESULT 29
ADQ95376
ID ADQ95376 standard; DNA; 11 BP.
XX
AC ADQ95376;
XX
DT 07-OCT-2004 (first entry)
XX
DE Branched immunomodulatory compound related oligonucleotide, SEQ ID 118.
XX
KW Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
KW Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Antiulcer;
KW Gastrointestinal; Nephrotropic; branched immunomodulatory compound;
KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
KW IFN-alpha; ss.
XX
OS Synthetic.
XX
FH Key Location/Qualifiers
FT modified_base 2 /*tag= a
FT /mod_base= OTHER
FT /note= "c= 5-bromocytosine"
XX
PN WO2004058159-A2.
XX
PD 15-JUL-2004.
XX
PF 17-DEC-2003; 2003WO-US040417.
XX
PR 23-DEC-2002; 2002US-0436406P.
XX
PA (DYNA-) DYNAVAX TECHNOLOGIES CORP.
XX
PI Fearon KL;
XX
DR WPI; 2004-561515/54.
XX
PT New branched immunomodulatory compound comprising at least three nucleic
PT acid moieties and at least one branch-point nucleoside, useful for
PT modulating an immune response in individual suffering e.g. allergy.
XX
PS Disclosure; SEQ ID NO 118; 183pp; English.
XX
CC The present invention relates to novel branched immunomodulatory
CC compounds (BIC) comprising at least three nucleic acid moieties, at least
CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
CC e.g. the ability to stimulate interferon (IFN)-gamma production from
CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
CC alpha production from human peripheral blood mononuclear cells and the
CC ability to stimulate B cell proliferation. The BIC compounds are useful
CC for modulating an immune response in an individual suffering from a
CC disorder associated with a T helper (Th)2-type immune response e.g.
CC allergy, allergy-induced asthma or an infectious disease; for increasing
CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
CC are also useful for immunomodulation of cells and individuals; in the
CC fields of biomedicine and immunology; for the manufacture of a medicament
CC for treating idiopathic pulmonary fibrosis, viral infection (e.g.
CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
CC ameliorating an IGE-related disorder in an individual. The disorders
CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,

CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
 CC cancer; infectious disease resistant to humoral immune responses (e.g.
 CC diseases caused by mycobacterial infections and intracellular pathogens,
 CC cellular pathogens e.g. bacteria or protozoans or by subcellular
 CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
 CC leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases
 CC caused by intracellular parasites such as malaria; leishmaniasis.
 CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
 CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
 CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
 CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.

XX
 SQ Sequence 11 BP; 2 A; 3 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 100.0%; Score 10; DB 12; Length 11;
 Best Local Similarity 100.0%; Pred. No. 4.7e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10

Db 2 CGAACGTTTCG 11

RESULT 30

ADQ95376/c

ID ADQ95376 standard; DNA; 11 BP.

XX

AC ADQ95376;

XX

XX

DT 07-OCT-2004 (first entry)

XX

DE Branched immunomodulatory compound related oligonucleotide, SEQ ID 118.

XX

KW Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;

KW Virucide; Antiinflammatory; Hepatotrophic; Anti-HIV; Auditory;

KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;

KW Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Antiulcer;

KW Gastrointestinal; Nephrotrophic; branched immunomodulatory compound;

KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;

XX IFN-alpha; ss.

XX

OS Synthetic.

XX

FH Key Location/Qualifiers

FT modified_base 2

FT /*tag= a

FT /mod_base= OTHER

FT /note= "c= 5-bromocytosine"

FT

XX

XX WO2004058159-A2.

XX

XX 15-JUL-2004.

XX

XX 17-DEC-2003; 2003WO-US040417.

XX

XX 23-DEC-2002; 2002US-0436406P.

XX

XX (DYNA-) DYNAVAX TECHNOLOGIES CORP.

XX

XX Fearon KL;

XX

XX WPT; 2004-561515/54.

XX

XX New branched immunomodulatory compound comprising at least three nucleic

XX acid moieties and at least one branch-point nucleoside, useful for

XX modulating an immune response in individual suffering e.g. allergy.

XX

XX Disclosure; SEQ ID NO 118; 183pp; English.

XX

XX The present invention relates to novel branched immunomodulatory

XX compounds (BIC) comprising at least three nucleic acid moieties, at least

XX one of which comprises the nucleotide sequence 5'-CG-3', and at least one

CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
 CC e.g. the ability to stimulate interferon (IFN)-gamma production from
 CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
 CC alpha production from human peripheral blood mononuclear cells and the
 CC ability to stimulate B cell proliferation. The BIC compounds are useful
 CC for modulating an immune response in an individual suffering from a
 CC disorder associated with a T helper (Th)2-type immune response e.g.
 CC allergy, allergy-induced asthma or an infectious disease; for increasing
 CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
 CC are also useful for immunomodulation of cells and individuals; in the
 CC fields of biomedicine and immunology; for the manufacture of a medicament
 CC for treating idiopathic pulmonary fibrosis, viral infection (e.g.
 CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
 CC ameliorating an IGE-related disorder in an individual. The disorders
 CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
 CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
 CC cancer; infectious disease resistant to humoral immune responses (e.g.
 CC diseases caused by mycobacterial infections and intracellular pathogens,
 CC cellular pathogens e.g. bacteria or protozoans or by subcellular
 CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
 CC leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases
 CC caused by intracellular parasites such as malaria; leishmaniasis,
 CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
 CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
 CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
 CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.

XX
 SQ Sequence 11 BP; 2 A; 3 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 100.0%; Score 10; DB 12; Length 11;

Best Local Similarity 100.0%; Pred. No. 4.7e+03;

Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10

Db 11 CGAACGTTTCG 2

RESULT 31

ADQ95387

ID ADQ95387 standard; DNA; 11 BP.

XX

AC ADQ95387;

XX

XX 07-OCT-2004 (first entry)

XX

DE Branched immunomodulatory compound related oligonucleotide, SEQ ID 129.

XX

KW Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;

KW Virucide; Antiinflammatory; Hepatotrophic; Anti-HIV; Auditory;

KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;

KW Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Antiulcer;

KW Gastrointestinal; Nephrotrophic; branched immunomodulatory compound;

KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;

XX IFN-alpha; ss.

XX

OS Synthetic.

XX

FH Key Location/Qualifiers

FT modified_base 2

FT /*tag= a

FT /mod_base= OTHER

FT /note= "c= 5-bromocytosine"

FT

XX

XX modified_base 6

XX /*tag= b

XX /mod_base= OTHER

XX /note= "c= 5-bromocytosine"

XX

XX WO2004058159-A2.

XX

XX 15-JUL-2004.

XX

PF 17-DEC-2003; 2003WO-US040417.
 XX 23-DEC-2002; 2002US-0436406P.
 XX (DYNA-) DYNAXX TECHNOLOGIES CORP.
 XX Fearon KL;
 XX WPI; 2004-561515/54.
 XX New branched immunomodulatory compound comprising at least three nucleic
 XX acid moieties and at least one branch-point nucleoside, useful for
 XX PT modulating an immune response in individual suffering e.g. allergy.
 XX
 XX PS Disclosure; SEQ ID NO 129; 183pp; English.
 XX
 XX The present invention relates to novel branched immunomodulatory
 XX compounds (BIC) comprising at least three nucleic acid moieties, at least
 XX one of which comprises the nucleotide sequence 5'-CG-3', and at least one
 XX branch-point nucleoside. The BIC compounds has immunomodulatory activity
 XX e.g. the ability to stimulate interferon (IFN)-gamma production from
 XX human peripheral blood mononuclear cells, the ability to stimulate IFN-
 XX alpha production from human peripheral blood mononuclear cells and the
 XX ability to stimulate B cell proliferation. The BIC compounds are useful
 XX for modulating an immune response in an individual suffering from a
 XX disorder associated with a T helper (Th) 2-type immune response e.g.
 XX allergy, allergy-induced asthma or an infectious disease; for increasing
 XX secretion of IFN-gamma by blood cells in an individual. The BIC compounds
 XX are also useful for immunomodulation of cells and individuals; in the
 XX fields of biomedicine and immunology; for the manufacture of a medicament
 XX ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
 XX hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
 XX ameliorating an Igs-related disorder in an individual. The disorders
 XX includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
 XX eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
 XX cancer; infectious disease resistant to humoral immune responses (e.g.
 XX diseases caused by mycobacterial infections and intracellular pathogens,
 XX cellular pathogens e.g. bacteria or protozoans or by subcellular
 XX pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
 XX leprosy or M. marinum or M. ulcerans infections; herpes viruses; diseases
 XX caused by intracellular parasites such as malaria; leishmaniasis,
 XX toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
 XX disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
 XX induced fibrosis, hepatic fibrosis including schistosomiasis-induced
 XX hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 XX the BIC compounds of the invention.
 XX
 XX SQ Sequence 11 BP; 2 A; 3 C; 3 G; 2 T; 1 U; 0 Other;
 Query Match 100.0%; Score 10; DB 12; Length 11;
 Best Local Similarity 90.0%; Pred. No. 4.7e+03;
 Matches 9; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
 Qy 1 CGAAGGTTCG 10
 Db 2 CGAAGGTTCG 11
 RESULT 32
 ADQ95387/c
 ID ADQ95387 standard; DNA; 11 BP.
 XX
 XX AC ADQ95387;
 XX
 XX DT 07-OCT-2004 (first entry)
 XX
 XX DE Branched immunomodulatory compound related oligonucleotide, SEQ ID 129.
 XX
 XX Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
 XX Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
 XX Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
 XX Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Antitumor;
 XX Gastrointestinal; Nephrotropic; branched immunomodulatory compound;

KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
 KW IFN-alpha; ss.
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT modified_base 2 /*tag= a
 FT /mod_base= OTHER
 FT /note= "c= 5-bromocytosine"
 FT modified_base 6 /*tag= b
 FT /mod_base= OTHER
 FT /note= "c= 5-bromocytosine"
 FT
 XX WO2004058159-A2.
 XX
 XX 15-JUL-2004.
 XX
 XX 17-DEC-2003; 2003WO-US040417.
 XX
 XX 23-DEC-2002; 2002US-0436406P.
 XX
 XX (DYNA-) DYNAXX TECHNOLOGIES CORP.
 XX Fearon KL;
 XX WPI; 2004-561515/54.
 XX
 XX New branched immunomodulatory compound comprising at least three nucleic
 XX acid moieties and at least one branch-point nucleoside, useful for
 XX PT modulating an immune response in individual suffering e.g. allergy.
 XX
 XX PS Disclosure; SEQ ID NO 129; 183pp; English.
 XX
 XX The present invention relates to novel branched immunomodulatory
 XX compounds (BIC) comprising at least three nucleic acid moieties, at least
 XX one of which comprises the nucleotide sequence 5'-CG-3', and at least one
 XX branch-point nucleoside. The BIC compounds has immunomodulatory activity
 XX e.g. the ability to stimulate interferon (IFN)-gamma production from
 XX human peripheral blood mononuclear cells, the ability to stimulate IFN-
 XX alpha production from human peripheral blood mononuclear cells and the
 XX ability to stimulate B cell proliferation. The BIC compounds are useful
 XX for modulating an immune response in an individual suffering from a
 XX disorder associated with a T helper (Th) 2-type immune response e.g.
 XX allergy, allergy-induced asthma or an infectious disease; for increasing
 XX secretion of IFN-gamma by blood cells in an individual. The BIC compounds
 XX are also useful for immunomodulation of cells and individuals; in the
 XX fields of biomedicine and immunology; for the manufacture of a medicament
 XX ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
 XX hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
 XX ameliorating an Igs-related disorder in an individual. The disorders
 XX includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
 XX eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
 XX cancer; infectious disease resistant to humoral immune responses (e.g.
 XX diseases caused by mycobacterial infections and intracellular pathogens,
 XX cellular pathogens e.g. bacteria or protozoans or by subcellular
 XX pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
 XX leprosy or M. marinum or M. ulcerans infections; herpes viruses; diseases
 XX caused by intracellular parasites such as malaria; leishmaniasis,
 XX toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
 XX disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
 XX induced fibrosis, hepatic fibrosis including schistosomiasis-induced
 XX hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 XX the BIC compounds of the invention.
 XX
 XX SQ Sequence 11 BP; 2 A; 3 C; 3 G; 2 T; 1 U; 0 Other;
 Query Match 100.0%; Score 10; DB 12; Length 11;
 Best Local Similarity 100.0%; Pred. No. 4.7e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 1 CGAAGGTTCG 10

```

Db      11 CGAACGTTTCG 2
|||||
RESULT 33
ADQ16825
ID      ADQ16825 standard; DNA; 11 BP.
XX
XX
AC      ADQ16825;
XX
XX      07-OCT-2004 (first entry)
XX
XX      Immunomodulatory polynucleotide, SEQ ID NO 104.
XX
XX      Immunomodulatory polynucleotide; IMP; palindromic sequence; dinucleotide;
KW      trinucleotide; antimicrobial; anti-allergic; antiasthmatic;
KW      dermatological; anti-inflammatory; ophthalmological; immunosuppressive;
KW      antibacterial; vasotrophic; antiparasitic; virucide; hepatotropic;
KW      anti-HIV; cytostatic; antiulcer; nephrotropic; IGE-related disorder;
KW      T helper; (TH)2-type immune response; vaccine; prophylactic; immune;
KW      interferon-gamma; interferon-alpha; type I interferon; IFN-alpha;
KW      IFN-omega; IFN-gamma; plasmacytoid dendritic cell; ss.
XX
XX      Unidentified.
XX
XX      WO2004058179-A2.
XX
XX      15-JUL-2004.
XX
XX      18-DEC-2003; 2003WO-US041001.
XX
XX      23-DEC-2002; 2002US-0436122P.
XX
XX      13-FEB-2003; 2003US-0447885P.
XX
XX      01-MAY-2003; 2003US-0467546P.
XX
XX      (DYNA-) DYNAVAX TECHNOLOGIES.
XX
XX      Dina D, Fearon KL, Marshall J;
XX      WPI; 2004-525782/50.
XX
XX      Immunomodulatory polynucleotide useful for the treatment of e.g. atopic
PT      dermatitis comprises palindromic sequence comprising at least eight bases
PT      in length, which contains at least two dinucleotides and at least one
PT      trinucleotide.
XX
XX      Example 1; SEQ ID NO 104; 119pp; English.
XX
XX      The invention relates to a novel immunomodulatory polynucleotide (IMP)
CC      comprising a palindromic sequence. The palindromic sequence comprises at
CC      least 8 bases in length, which contains at least two dinucleotides (CG),
CC      and at least one trinucleotide (TCG) at or near the 5' end of the
CC      polynucleotide. The CG dinucleotides are separated by 0 - 5 bases. The 5'
CC      T of the (TCG) is positioned 0 - 3 bases from the 5' end of the
CC      polynucleotide. The (TCG) is separated from the 5' end of the
CC      palindromic sequence by 0 - 2 bases. The palindromic sequence includes
CC      all or part of the (TCG) sequence, where y=1 or 2. The immunomodulatory
CC      polynucleotides have the following activities: antimicrobial,
CC      anti-allergic, antiasthmatic, dermatological, anti-inflammatory,
CC      ophthalmological, immunosuppressive, antibacterial, vasotrophic,
CC      antiparasitic, virucide, hepatotropic, anti-HIV, cytostatic, antiulcer,
CC      and nephrotropic. The immunomodulatory polynucleotides can be used for
CC      ameliorating a symptom of an infectious disease and IGE-related disorder.
CC      The IMP's may also be used for the treatment of a disorder associated
CC      with a T helper (TH)2-type immune response (e.g. allergies, allergy-
CC      induced asthma or atopic dermatitis), individuals receiving vaccines such
CC      as therapeutic vaccines (e.g. vaccines comprising an allergy epitope, a
CC      mycobacterial epitope or a tumour associated epitope) or prophylactic
CC      vaccines. The IMP's can also be used for the treatment of e.g. food
CC      allergies, rhinitis, atopic dermatitis, conjunctivitis, urticaria, shock,
CC      Hymenoptera sting allergies and drug allergies and parasitic infections;
CC      viral disease e.g. Hepatitis B, Hepatitis C, Influenza, Acquired
CC      immunodeficiency syndrome (AIDS) and Herpes zoster; and cancer;

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CC      inflammatory disorder e.g. ulcerative colitis; fibrotic disorder e.g.
CC      idiopathic pulmonary fibrosis, scleroderma, cutaneous radiation-induced
CC      fibrosis, hepatic fibrosis including schistosomiasis-induced hepatic
CC      fibrosis, renal fibrosis. The IMP's may also be used to create a
CC      prophylactic vaccine to increase resistance to infection by bacterial or
CC      viral pathogens. The immunomodulatory polynucleotide modulates an immune
CC      response; or increases interferon-gamma; or interferon-alpha; effectively
CC      stimulates cytokines including type I interferons e.g. IFN-alpha and IFN-
CC      omega and IFN-gamma, production from human cells; effectively stimulates
CC      B cells to proliferate; and activates plasmacytoid dendritic cells to
CC      undergo maturation which can result in retardation of plasmacytoid
CC      dendritic cell apoptosis in culture. This polynucleotide sequence
CC      represents an immunomodulatory polynucleotide of the invention.
XX
XX      Sequence 11 BP; 2 A; 3 C; 3 G; 3 T; 0 U; 0 Other;
SQ
Query Match      100.0%; Score 10; DB 13; Length 11;
Best Local Similarity 100.0%; Pred. No. 4.7e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY      1 CGAACGTTTCG 10
DB      |||||
        2 CGAACGTTTCG 11
RESULT 34
ADQ16825/C
ID      ADQ16825 standard; DNA; 11 BP.
XX
XX      ADQ16825;
XX
XX      07-OCT-2004 (first entry)
XX
XX      Immunomodulatory polynucleotide, SEQ ID NO 104.
XX
XX      Immunomodulatory polynucleotide; IMP; palindromic sequence; dinucleotide;
KW      trinucleotide; antimicrobial; anti-allergic; antiasthmatic;
KW      dermatological; anti-inflammatory; ophthalmological; immunosuppressive;
KW      antibacterial; vasotrophic; antiparasitic; virucide; hepatotropic;
KW      anti-HIV; cytostatic; antiulcer; nephrotropic; IGE-related disorder;
KW      T helper; (TH)2-type immune response; vaccine; prophylactic; immune;
KW      interferon-gamma; interferon-alpha; type I interferon; IFN-alpha;
KW      IFN-omega; IFN-gamma; plasmacytoid dendritic cell; ss.
XX
XX      Unidentified.
XX
XX      WO2004058179-A2.
XX
XX      15-JUL-2004.
XX
XX      18-DEC-2003; 2003WO-US041001.
XX
XX      23-DEC-2002; 2002US-0436122P.
XX
XX      13-FEB-2003; 2003US-0447885P.
XX
XX      01-MAY-2003; 2003US-0467546P.
XX
XX      (DYNA-) DYNAVAX TECHNOLOGIES.
XX
XX      Dina D, Fearon KL, Marshall J;
XX      WPI; 2004-525782/50.
XX
XX      Immunomodulatory polynucleotide useful for the treatment of e.g. atopic
PT      dermatitis comprises palindromic sequence comprising at least eight bases
PT      in length, which contains at least two dinucleotides and at least one
PT      trinucleotide.
XX
XX      Example 1; SEQ ID NO 104; 119pp; English.
XX
XX      The invention relates to a novel immunomodulatory polynucleotide (IMP)
CC      comprising a palindromic sequence. The palindromic sequence comprises at
CC      least 8 bases in length, which contains at least two dinucleotides (CG),
CC      and at least one trinucleotide (TCG) at or near the 5' end of the
CC      polynucleotide. The CG dinucleotides are separated by 0 - 5 bases. The 5'
CC      T of the (TCG) is positioned 0 - 3 bases from the 5' end of the
CC      polynucleotide. The (TCG) is separated from the 5' end of the
CC      palindromic sequence by 0 - 2 bases. The palindromic sequence includes
CC      all or part of the (TCG) sequence, where y=1 or 2. The immunomodulatory
CC      polynucleotides have the following activities: antimicrobial,
CC      anti-allergic, antiasthmatic, dermatological, anti-inflammatory,
CC      ophthalmological, immunosuppressive, antibacterial, vasotrophic,
CC      antiparasitic, virucide, hepatotropic, anti-HIV, cytostatic, antiulcer,
CC      and nephrotropic. The immunomodulatory polynucleotides can be used for
CC      ameliorating a symptom of an infectious disease and IGE-related disorder.
CC      The IMP's may also be used for the treatment of a disorder associated
CC      with a T helper (TH)2-type immune response (e.g. allergies, allergy-
CC      induced asthma or atopic dermatitis), individuals receiving vaccines such
CC      as therapeutic vaccines (e.g. vaccines comprising an allergy epitope, a
CC      mycobacterial epitope or a tumour associated epitope) or prophylactic
CC      vaccines. The IMP's can also be used for the treatment of e.g. food
CC      allergies, rhinitis, atopic dermatitis, conjunctivitis, urticaria, shock,
CC      Hymenoptera sting allergies and drug allergies and parasitic infections;
CC      viral disease e.g. Hepatitis B, Hepatitis C, Influenza, Acquired
CC      immunodeficiency syndrome (AIDS) and Herpes zoster; and cancer;

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polynucleotide. The CG dinucleotides are separated by 0 - 5 bases. The 5' T of the (TCG)Y is positioned 0 - 3 bases from the 5' end of the polynucleotide. The (TCG)Y is separated from the 5' end of the palindromic sequence by 0 - 2 bases. The palindromic sequence includes all or part of the (TCG)Y sequence, where Y=1 or 2. The immunomodulatory polynucleotides have the following activities: antimicrobial, antiallergic, antiasthmatic, dermatological, antiinflammatory, ophthalmological, immunosuppressive, antibacterial, vasotropic, antiparasitic, virucide, hepatotropic, anti-HIV, cytostatic, antiulcer, and nephrotropic. The immunomodulatory polynucleotides can be used for ameliorating a symptom of an infectious disease and IgE-related disorder. The IMP's may also be used for the treatment of a disorder associated with a T helper (TH)2-type immune response (e.g. allergies, allergy-induced asthma or atopic dermatitis), individuals receiving vaccines such as therapeutic vaccines (e.g. vaccines comprising an allergy epitope, a mycobacterial epitope or a tumour associated epitope) or prophylactic vaccines. The IMP's can also be used for the treatment of e.g. food allergies, rhinitis, atopic dermatitis, conjunctivitis, urticaria, shock, Hymenoptera sting allergies and drug allergies and parasitic infections; viral disease e.g. Hepatitis B, Hepatitis C, Influenza, Acquired immunodeficiency syndrome (AIDS) and Herpes zoster; and cancer; inflammatory disorder e.g. ulcerative colitis; fibrotic disorder e.g. idiopathic pulmonary fibrosis, scleroderma, cutaneous radiation-induced fibrosis, hepatic fibrosis including schistosomiasis-induced hepatic fibrosis, renal fibrosis. The IMP's may also be used to create a prophylactic vaccine to increase resistance to infection by bacterial or viral pathogens. The immunomodulatory polynucleotide modulates an immune response; or increases interferon-gamma; or interferon-alpha; effectively stimulates cytokines including type I interferons e.g. IFN-alpha and IFN-omega and IFN-gamma, production from human cells; effectively stimulates B cells to proliferate; and activates plasmacytoid dendritic cells to undergo maturation which can result in retardation of plasmacytoid dendritic cell apoptosis in culture. This polynucleotide sequence represents an immunomodulatory polynucleotide of the invention.

XX Sequence 11 BP; 2 A; 3 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 100.0%; Score 10; DB 13; Length 11;
Best Local Similarity 100.0%; Pred. No. 4.7e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
Db 11 CGAACGTTTCG 2

RESULT 35
ADQ95393

XX ADQ95393 standard; DNA; 12 BP.

XX AC ADQ95393;

XX DT 07-OCT-2004 (first entry)

XX DE Branched immunomodulatory compound related oligonucleotide, SEQ ID 135.

XX Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
KW Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Antiulcer;
KW Gastrointestinal; Nephrotropic; branched immunomodulatory compound;
KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
KW IFN-alpha; ss.

OS Synthetic.

XX Key Location/Qualifiers
FT modified_base 12

FT /*tag= a
FT /mod_base= OTHER

FT /note= "A-3" is attached to the 5' position of a branch
FT point adenosine, rA, which is further attached to two
FT oligonucleotides, SEQ ID 136 at the 3' position of rA,
FT

FT and SEQ ID 137 at the 2' position of rA"
XX PN W02004058159-A2.

XX PD 15-JUN-2004.

XX PF 17-DEC-2003; 2003WO-US040417.

XX PR 23-DEC-2002; 2002US-0436406P.

XX PA (DYNA-) DYNAVAX TECHNOLOGIES CORP.

XX PI Fearon KU;

XX DR WPI; 2004-561515/54.

XX New branched immunomodulatory compound comprising at least three nucleic acid moieties and at least one branch-point nucleoside, useful for modulating an immune response in individual suffering e.g. allergy.

XX Example 5; SEQ ID NO 135; 183pp; English.

XX The present invention relates to novel branched immunomodulatory compounds (BIC) comprising at least three nucleic acid moieties, at least one of which comprises the nucleotide sequence 5'-CG-3', and at least one branch-point nucleoside. The BIC compounds has immunomodulatory activity e.g. the ability to stimulate interferon (IFN)-gamma production from human peripheral blood mononuclear cells, the ability to stimulate IFN-alpha production from human peripheral blood mononuclear cells and the ability to stimulate B cell proliferation. The BIC compounds are useful for modulating an immune response in an individual suffering from a disorder associated with a T helper (Th)2-type immune response e.g. allergy, allergy-induced asthma or an infectious disease; for increasing secretion of IFN-gamma by blood cells in an individual. The BIC compounds are also useful for immunomodulation of cells and individuals; in the fields of biomedicine and immunology; for the manufacture of a medicament; for treating idiopathic pulmonary fibrosis, viral infection (e.g. hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for ameliorating an Igs-related disorder in an individual. The disorders includes atopic dermatitis, eosinophilic gastrointestinal inflammation, eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis; cancer; infectious disease resistant to humoral immune responses (e.g. diseases caused by mycobacterial infections and intracellular pathogens, cellular pathogens e.g. bacteria or protozoans or by subcellular pathogens e.g. viruses); mycobacterial diseases such as tuberculosis, leprosy or M. marinum or M. ulcerans infections; herpes viruses; diseases caused by intracellular parasites such as malaria; leishmaniasis, toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-induced fibrosis, hepatic fibrosis including schistosomiasis-induced hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in the BIC compounds of the invention.

XX Sequence 12 BP; 3 A; 3 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 100.0%; Score 10; DB 12; Length 12;

Best Local Similarity 100.0%; Pred. No. 4.7e+03;

Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10

Db 2 CGAACGTTTCG 11

RESULT 36
ADQ95393/c

XX ID ADQ95393 standard; DNA; 12 BP.

XX AC ADQ95393;

XX DT 07-OCT-2004 (first entry)

XX DE Branched immunomodulatory compound related oligonucleotide, SEQ ID 135.

XX	Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
KW	Viricide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
KW	Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
KW	Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Antulcer;
KW	Gastrointestinal; Nephrotropic; branched immunomodulatory compound;
KW	immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
KW	IFN-alpha; ss.
XX	
OS	Synthetic.
XX	
XX	
Key	Location/Qualifiers
PH	12
FT	modified_base
FT	/*tag= a
FT	/mod_base= OTHER
FT	/note= "A-3' is attached to the 5' position of a branch
FT	point adenosine, RA, which is further attached to two
FT	oligonucleotides, SEQ ID 136 at the 3' position of RA,
FT	and SEQ ID 137 at the 2' position of RA"
XX	
XX	
PN	WO2004058159-A2.
XX	
PD	15-JUL-2004.
XX	
PD	
XX	
PF	17-DEC-2003; 2003WO-US040417.
XX	
PR	23-DEC-2002; 2002US-0436406P.
XX	
PA	(DYNA-) DYNAXX TECHNOLOGIES CORP.
XX	
PI	Fearon KL;
XX	
DR	WPI; 2004-561515/54.
XX	
XX	New branched immunomodulatory compound comprising at least three nucleic
PT	acid moieties and at least one branch-point nucleoside, useful for
PT	modulating an immune response in individual suffering e.g. allergy.
XX	
PS	Example 5; SEQ ID NO 135; 183pp; English.
XX	
XX	The present invention relates to novel branched immunomodulatory
CC	compounds (BIC) comprising at least three nucleic acid moieties, at least
CC	one of which comprises the nucleotide sequence 5'-CG-3', and at least one
CC	branch-point nucleoside. The BIC compounds has immunomodulatory activity
CC	e.g. the ability to stimulate interferon (IFN)-gamma production from
CC	human peripheral blood mononuclear cells, the ability to stimulate IFN-
CC	alpha production from human peripheral blood mononuclear cells and the
CC	ability to stimulate B cell proliferation. The BIC compounds are useful
CC	for modulating an immune response in an individual suffering from a
CC	disorder associated with a T helper (Th)2-type immune response e.g.
CC	allergy, allergy-induced asthma or an infectious disease; for increasing
CC	secretion of IFN-gamma by blood cells in an individual. The BIC compounds
CC	are also useful for immunomodulation of cells and individuals; in the
CC	fields of biomedicine and immunology; for the manufacture of a medicament
CC	; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
CC	hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
CC	ameliorating an IgE-related disorder in an individual. The disorders
CC	includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
CC	eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
CC	cancer; infectious disease resistant to humoral immune responses (e.g.
CC	diseases caused by mycobacterial infections and intracellular pathogens,
CC	cellular pathogens e.g. bacteria or protozoans or by subcellular
CC	pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
CC	leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases
CC	caused by intracellular parasites such as malaria; leishmaniasis,
CC	toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
CC	disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
CC	induced fibrosis, hepatic fibrosis including schistosomiasis-induced
CC	hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
CC	the BIC compounds of the invention.
XX	
SQ	Sequence 12 BP; 3 A; 3 C; 3 G; 3 T; 0 U; 0 Other;

Query Match	100.0%;	Score 10;	DB 12;	Length 12;
Best Local Similarity	100.0%;	Pred. No. 4.7e+03;		
Matches	10;	Conservative	0;	Mismatches 0; Indels 0; Gaps 0

QY	1	CGAACGTTTCG 10
Db	11	CGAACGTTTCG 2

RESULT 37	
ADQ16824	
ID	ADQ16824 standard; DNA; 12 BP.
XX	ADQ16824;
XX	
DT	07-OCT-2004 (first entry)
XX	
DE	Immunomodulatory polynucleotide, SEQ ID No 103.
XX	
KW	Immunomodulatory polynucleotide; IMP; palindromic sequence; dinucleotide; trinucleotide; antimicrobial; antiallergic; antiasthmatic; dermatological; antiinflammatory; ophthalmological; immunosuppressive; antibacterial; vasotropic; antiparasitic; virucide; hepatotropic; anti-HIV; cytostatic; antiulcer; nephrotropic; Igs-related disorder; T helper; (TH)2-type immune response; vaccine; prophylactic; immune; interferon-gamma; interferon-alpha; type I interferon; IFN-alpha; IFN-omega; IFN-gamma; plasmacytoid dendritic cell; ss.
XX	
OS	Unidentified.
XX	
PN	WO2004058179-A2.
XX	
PD	15-JUL-2004.
XX	
PF	18-DEC-2003; 2003WO-US041001.
XX	
PR	23-DEC-2002; 2002US-0436122P.
PR	13-FEB-2003; 2003US-0447885P.
PR	01-MAY-2003; 2003US-0467546P.
XX	
PA	(DYNA-) DYNAVAX TECHNOLOGIES.
XX	
PI	Dina D, Fearon KL, Marshall J;
XX	
DR	WPI; 2004-525782/50.
XX	
PT	Immunomodulatory polynucleotide useful for the treatment of e.g. atopic dermatitis comprising palindromic sequence comprising at least eight bases in length, which contains at least two dinucleotides and at least one trinucleotide.
PT	
PT	
XX	
PS	Example 1; SEQ ID NO 103; 119pp; English.
XX	
CC	The invention relates to a novel immunomodulatory polynucleotide (IMP) comprising a palindromic sequence. The palindromic sequence comprises at least 8 bases in length, which contains at least two dinucleotides (CG), and at least one trinucleotide (TCG) at or near the 5' end of the polynucleotide. The CG dinucleotides are separated by 0 - 5 bases. The 5' T of the (TCG) is positioned 0 - 3 bases from the 5' end of the polynucleotide. The (TCG) is separated from the 5' end of the palindromic sequence by 0 - 2 bases. The palindromic sequence includes all or part of the (TCG) sequence, where y=1 or 2. The immunomodulatory polynucleotides have the following activities: antimicrobial, antiallergic, antiasthmatic, dermatological, antiinflammatory, ophthalmological, immunosuppressive, antibacterial, vasotropic, antiparasitic, virucide, hepatotropic, anti-HIV, cytostatic, antiulcer, and nephrotropic. The immunomodulatory polynucleotides can be used for ameliorating a symptom of an infectious disease and IgE-related disorder. The IMP may also be used for the treatment of a disorder associated with a T helper (TH)2-type immune response (e.g. allergies, allergy-induced asthma or atopic dermatitis), individuals receiving vaccines such as therapeutic vaccines (e.g. vaccines comprising an allergy epitope, a mycobacterial epitope or a tumour associated epitope) or prophylactic

CC vaccines. The IMP's can also be used for the treatment of e.g. food
 CC allergies, rhinitis, atopic dermatitis, conjunctivitis, urticaria, shock,
 CC Hymenoptera sting allergies and drug allergies and parasitic infections;
 CC viral disease e.g. Hepatitis B, Hepatitis C, influenza, Acquired
 CC immunodeficiency syndrome (AIDS) and Herpes zoster; and cancer;
 CC inflammatory disorder e.g. ulcerative colitis; fibrotic disorder e.g.
 CC idiopathic pulmonary fibrosis, scleroderma, cutaneous radiation-induced
 CC fibrosis, hepatic fibrosis including schistosomiasis-induced hepatic
 CC fibrosis, renal fibrosis. The IMP's may also be used to create a
 CC prophylactic vaccine to increase resistance to infection by bacterial or
 CC viral pathogens. The immunomodulatory polynucleotide modulates an immune
 CC response; or increases interferon-gamma; or interferon-alpha; effectively
 CC stimulates cytokines including type I interferons e.g. IFN-alpha and IFN-
 CC omega and IFN-gamma, production from human cells; effectively stimulates
 CC B cells to proliferate; and activates plasmacytoid dendritic cells to
 CC undergo maturation which can result in retardation of plasmacytoid
 CC dendritic cell apoptosis in culture. This polynucleotide sequence
 CC represents an immunomodulatory polynucleotide of the invention.

XX Sequence 12 BP; 3 A; 3 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 100.0%; Score 10; DB 13; Length 12;

Best Local Similarity 100.0%; Pred. No. 4.7e+03;

Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10

Db 2 CGAACGTTTCG 11

RESULT 38

ADQ16824/C

ID ADQ16824 standard; DNA; 12 BP.

XX AC ADQ16824;

DT 07-OCT-2004 (first entry)

DE Immunomodulatory polynucleotide, SEQ ID No 103.

XX Immunomodulatory polynucleotide; IMP; palindromic sequence; dinucleotide;
 KW trinucleotide; antimicrobial; antiallergic; antiasthmatic;
 KW dermatological; antiinflammatory; ophthalmological; immunosuppressive;
 KW antibacterial; vasotrophic; antiparasitic; virucide; hepatotropic;
 KW anti-HIV; cytostatic; antiulcer; nephrotropic; IGE-related disorder;
 KW T helper; (TH)2-type immune response; vaccine; prophylactic; immune;
 KW interferon-gamma; interferon-alpha; type I interferon; IFN-alpha;
 KW IFN-omega; IFN-gamma; plasmacytoid dendritic cell; ss.

XX Unidentified.

XX WO2004058179-A2.

XX 15-JUL-2004.

XX 18-DEC-2003; 2003WO-US041001.

XX 23-DEC-2002; 2002US-0436122P.

XX 13-FEB-2003; 2003US-0447885P.

XX 01-MAY-2003; 2003US-0467546P.

XX (DYNA-) DYNAVAX TECHNOLOGIES.

XX Dina D, Fearon KL, Marshall J;

XX WPI; 2004-525782/50.

XX Immunomodulatory polynucleotide useful for the treatment of e.g. atopic
 PT dermatitis comprises palindromic sequence comprising at least eight bases
 PT in length, which contains at least two dinucleotides and at least one
 PT trinucleotide.

XX Example 1; SEQ ID NO 103; 119pp; English.

XX The invention relates to a novel immunomodulatory polynucleotide (IMP)
 CC comprising a palindromic sequence. The palindromic sequence comprises at
 CC least 8 bases in length, which contains at least two dinucleotides (CG),
 CC and at least one trinucleotide (TCG) at or near the 5' end of the
 CC polynucleotide. The CG dinucleotides are separated by 0 - 5 bases. The 5'
 CC T of the (TCG) is positioned 0 - 3 bases from the 5' end of the
 CC palindromic sequence by 0 - 2 bases. The palindromic sequence includes
 CC all or part of the (TCG) sequence, where y=1 or 2. The immunomodulatory
 CC polynucleotides have the following activities: antimicrobial,
 CC antiallergic, antiasthmatic, dermatological, antiinflammatory,
 CC ophthalmological, immunosuppressive, antibacterial, vasotrophic,
 CC antiparasitic, virucide, hepatotropic, anti-HIV, cytostatic, antiulcer,
 CC and nephrotropic. The immunomodulatory polynucleotides can be used for
 CC ameliorating a symptom of an infectious disease and IGE-related disorder.
 CC The IMP's may also be used for the treatment of a disorder associated
 CC with a T helper (TH)2-type immune response (e.g. allergies, allergy-
 CC induced asthma or atopic dermatitis), individuals receiving vaccines such
 CC as therapeutic vaccines (e.g. vaccines comprising an allergy epitope, a
 CC mycobacterial epitope or a tumour associated epitope) or prophylactic
 CC vaccines. The IMP's can also be used for the treatment of e.g. food
 CC allergies, rhinitis, atopic dermatitis, conjunctivitis, urticaria, shock,
 CC Hymenoptera sting allergies and drug allergies and parasitic infections;
 CC viral disease e.g. Hepatitis B, Hepatitis C, influenza, Acquired
 CC immunodeficiency syndrome (AIDS) and Herpes zoster; and cancer;
 CC inflammatory disorder e.g. ulcerative colitis; fibrotic disorder e.g.
 CC idiopathic pulmonary fibrosis, scleroderma, cutaneous radiation-induced
 CC fibrosis, hepatic fibrosis including schistosomiasis-induced hepatic
 CC fibrosis, renal fibrosis. The IMP's may also be used to create a
 CC prophylactic vaccine to increase resistance to infection by bacterial or
 CC viral pathogens. The immunomodulatory polynucleotide modulates an immune
 CC response; or increases interferon-gamma; or interferon-alpha; effectively
 CC stimulates cytokines including type I interferons e.g. IFN-alpha and IFN-
 CC omega and IFN-gamma, production from human cells; effectively stimulates
 CC B cells to proliferate; and activates plasmacytoid dendritic cells to
 CC undergo maturation which can result in retardation of plasmacytoid
 CC dendritic cell apoptosis in culture. This polynucleotide sequence
 CC represents an immunomodulatory polynucleotide of the invention.

XX Sequence 12 BP; 3 A; 3 C; 3 G; 3 T; 0 U; 0 Other;

Query Match 100.0%; Score 10; DB 13; Length 12;

Best Local Similarity 100.0%; Pred. No. 4.7e+03;

Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10

Db 11 CGAACGTTTCG 2

RESULT 39

ABC16000

ID ABC16000 standard; DNA; 13 BP.

XX AC ABC16000;

XX 20-FEB-2002 (first entry)

XX Oligonucleotide SEQ ID NO 16007 for detecting SNP TSC00003513.

XX SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX Homo sapiens.

XX WO200177384-A2.

XX 18-OCT-2001.

XX 06-APR-2001; 2001WO-IB0000713.

XX SQ Sequence 13 BP; 4 A; 4 C; 3 G; 2 T; 0 U; 0 Other;
 Query Match 100.0%; Score 10; DB 5; Length 13;
 Best Local Similarity 100.0%; Pred. No. 4.7e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
 |||||
 Db 3 CGAACGTTTCG 12

RESULT 42
 ABC16001/c
 ID ABC16001 standard; DNA; 13 BP.
 AC ABC16001;
 XX
 XX 20-FEB-2002 (first entry)
 DT
 XX
 DE Oligonucleotide SEQ ID NO 16008 for detecting SNP TSC0003513.
 XX
 KW SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
 KW peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
 KW central nervous system; gastrointestinal; respiratory; immune; metabolic.
 XX
 OS Homo sapiens.
 XX
 XX WO200177384-A2.
 PN
 XX 18-OCT-2001.
 PD
 XX
 XX 06-APR-2001; 2001WO-1B000713.
 PF
 XX
 XX 07-APR-2000; 2000DE-01019173.
 PR
 XX
 PA (EPIG-) EPIGENOMICS AG.
 XX
 XX Olek A, Piepenbrock C, Berlin K;
 PI
 XX WPI; 2001-657177/75.
 DR
 XX Set of oligonucleotides, useful for diagnosis and cell typing, is
 PT designed to detect single-nucleotide polymorphisms and cytosine
 PT methylation status.
 PT
 XX Claim 1; SEQ ID NO 16008; 29pp + Sequence Listing; German.
 PS
 XX This invention describes novel oligonucleotide primers or peptide nucleic
 CC acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
 CC and cytosine methylation status in chemically pretreated genomic DNA. The
 CC oligonucleotides are used for diagnosis and/or prognosis of cancer and a
 CC range of diseases including immune system, gastrointestinal, respiratory,
 CC central nervous system, cardiovascular and metabolic disorders. The
 CC oligomers are also used for detecting cell type differentiation. ABC00010
 CC -ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073
 CC represent the oligomers described in the invention. NOTE: The sequence
 CC data for this patent did not form part of the printed specification, but
 CC was obtained in electronic format from WIPO at
 CC ftp.wipo.int/pub/published_pct_sequences
 XX
 XX Sequence 13 BP; 4 A; 4 C; 3 G; 2 T; 0 U; 0 Other;
 SQ
 Query Match 100.0%; Score 10; DB 5; Length 13;
 Best Local Similarity 100.0%; Pred. No. 4.7e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
 |||||
 Db 12 CGAACGTTTCG 3

RESULT 43

ABQ75224
 ID ABQ75224 standard; DNA; 13 BP.
 XX
 AC ABQ75224;
 XX
 DT 05-NOV-2002 (first entry)
 XX
 DE ISS immunomodulatory oligonucleotide SEQ ID NO:97.
 XX
 KW Immunostimulatory sequence; ISS: immunomodulatory; immune response;
 KW allergy; asthma; infectious disease; interferon-gamma; IFN-gamma;
 KW idiopathic pulmonary fibrosis; viral infection; mycobacterial disease;
 KW malaria; leishmaniasis; toxoplasmosis; schistosomiasis; clonorchiasis;
 KW immunoglobulin E; IgE-related disorder; antiallergic; antiasthmatic;
 KW virucide; antibacterial; protozoacide; ss.
 XX
 OS Synthetic.
 XX
 XX WO200252002-A2.
 PN
 XX 04-JUL-2002.
 PD
 XX 27-DEC-2001; 2001WO-US050821.
 PF
 XX 27-DEC-2000; 2000US-0258675P.
 PR
 XX (DYNA-) DYNAVAX TECHNOLOGIES CORP.
 PA
 XX Fearon KL, Dina D;
 PI
 XX WPI; 2002-657426/70.
 DR
 XX Immunomodulatory polynucleotide for modulating an immune response in a
 PT subject suffering from disorders associated with Th2-type immune
 PT response, e.g. allergy, or infectious disease, comprises an
 PT immunostimulatory sequence.
 XX
 XX Disclosure; Page 23; 95pp; English.
 XX
 CC The present invention describes an immunomodulatory polynucleotide (I)
 CC comprising an immunostimulatory sequence (ISS). Also described: (1) an
 CC immunomodulatory composition comprising (1); (2) an immunomodulatory
 CC polynucleotide/microcarrier (IMP/MC) complex, comprising (1) linked to a
 CC biodegradable MC, where the MC is less than 10 micrometre in size; and
 CC (3) a kit comprising (1). (1) has antiallergic, antiasthmatic, virucide,
 CC antibacterial and protozoacide activities, and can be used as a modulator
 CC of immune response. (1) is useful for modulating an immune response in an
 CC individual suffering from disorders associated with a Th2-type immune
 CC response, especially an allergy or asthma, or an infectious disease. (1)
 CC is also useful for increasing interferon-gamma (IFN-gamma) in an
 CC individual having idiopathic pulmonary fibrosis, or IFN-alpha in an
 CC individual having a viral infection. (1) is further useful for
 CC ameliorating a symptom of an infectious disease caused by a cellular
 CC pathogen such as mycobacterial disease, malaria, leishmaniasis,
 CC toxoplasmosis, schistosomiasis and clonorchiasis in an individual, or a
 CC symptom of an immunoglobulin E (IgE)-related disorder, preferably an
 CC allergy-related disorder, in particular asthma in an individual. The
 CC present sequence represents an immunomodulatory oligonucleotide from the
 CC present invention
 XX
 XX Sequence 13 BP; 2 A; 4 C; 4 G; 3 T; 0 U; 0 Other;
 SQ
 Query Match 100.0%; Score 10; DB 6; Length 13;
 Best Local Similarity 100.0%; Pred. No. 4.7e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
 |||||
 Db 4 CGAACGTTTCG 13

RESULT 44
 ABQ75224/c

ID ABQ75224 standard; DNA; 13 BP.
XX
AC
XX ABQ75224;
XX
DT 05-NOV-2002 (first entry)
XX
DE ISS immunomodulatory oligonucleotide SEQ ID NO:97.
XX
XX Immunostimulatory sequence; ISS: immunomodulatory; immune response;
KW allergy; asthma; infectious disease; interferon-gamma; IFN-gamma;
KW idiopathic pulmonary fibrosis; viral infection; mycobacterial disease;
KW malaria; leishmaniasis; toxoplasmosis; schistosomiasis; clonorchiasis;
KW immunoglobulin E; IgE-related disorder; antiallergic; antiasthmatic;
KW virucide; antibacterial; protozoacide; ss.
XX
OS Synthetic.
XX
XX WO200252002-A2.
XX
XX 04-JUL-2002.
XX
XX 27-DEC-2001; 2001WO-US050821.
XX
XX 27-DEC-2000; 2000US-0258675P.
XX
XX (DYNA-) DYNAVAX TECHNOLOGIES CORP.
XX
XX Fearon KL, Dina D;
XX WPI; 2002-657426/70.
XX
XX Immunomodulatory polynucleotide for modulating an immune response in a
PT subject suffering from disorders associated with Th2-type immune
PT response, e.g. allergy, or infectious disease, comprises an
PT immunostimulatory sequence.
XX
XX Disclosure; Page 23; 95pp; English.
XX
XX The present invention describes an immunomodulatory polynucleotide (I)
CC comprising an immunostimulatory sequence (ISS). Also described: (1) an
CC immunomodulatory composition comprising (1); (2) an immunomodulatory
CC polynucleotide/microcarrier (IMP/MC) complex, comprising (1) linked to a
CC biodegradable MC, where the MC is less than 10 micrometre in size; and
CC (3) a kit comprising (1). (1) has antiallergic, antiasthmatic, virucide,
CC antibacterial and protozoacide activities, and can be used as a modulator
CC of immune response. (1) is useful for modulating an immune response in an
CC individual suffering from disorders associated with a Th2-type immune
CC response, especially an allergy or asthma, or an infectious disease. (1)
CC is also useful for increasing interferon-gamma (IFN-gamma) in an
CC individual having idiopathic pulmonary fibrosis, or IFN-alpha in an
CC individual having a viral infection. (1) is further useful for
CC ameliorating a symptom of an infectious disease caused by a cellular
CC pathogen such as mycobacterial disease, malaria, leishmaniasis,
CC toxoplasmosis, schistosomiasis and clonorchiasis in an individual, or a
CC symptom of an immunoglobulin E (IgE)-related disorder, preferably an
CC allergy-related disorder, in particular asthma in an individual. The
CC present sequence represents an immunomodulatory oligonucleotide from the
XX present invention
XX
XX Sequence 13 BP; 2 A; 4 C; 4 G; 3 T; 0 U; 0 Other;
Query Match 100.0%; Score 10; DB 6; Length 13;
Best Local Similarity 100.0%; Pred. No. 4.7e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 CGAACGTTTCG 10
Db 13 CGAACGTTTCG 4
RESULT 45
ABQ75225
.ID ABQ75225 standard; DNA; 13 BP.

XX ABQ75225;
XX
XX 05-NOV-2002 (first entry)
XX
XX ISS immunomodulatory oligonucleotide SEQ ID NO:99.
XX
XX Immunostimulatory sequence; ISS: immunomodulatory; immune response;
KW allergy; asthma; infectious disease; interferon-gamma; IFN-gamma;
KW idiopathic pulmonary fibrosis; viral infection; mycobacterial disease;
KW malaria; leishmaniasis; toxoplasmosis; schistosomiasis; clonorchiasis;
KW immunoglobulin E; IgE-related disorder; antiallergic; antiasthmatic;
KW virucide; antibacterial; protozoacide; ss.
XX
OS Synthetic.
XX
XX Key Location/Qualifiers
FH modified_base 2 /*tag= a
FT /mod_base= OTHER
FT /note= "5-bromocytosine"
FT
XX WO200252002-A2.
XX
XX 04-JUL-2002.
XX
XX 27-DEC-2001; 2001WO-US050821.
XX
XX 27-DEC-2000; 2000US-0258675P.
XX
XX (DYNA-) DYNAVAX TECHNOLOGIES CORP.
XX
XX Fearon KL, Dina D;
XX WPI; 2002-657426/70.
XX
XX Immunomodulatory polynucleotide for modulating an immune response in a
PT subject suffering from disorders associated with Th2-type immune
PT response, e.g. allergy, or infectious disease, comprises an
PT immunostimulatory sequence.
XX
XX Disclosure; Page 23; 95pp; English.
XX
XX The present invention describes an immunomodulatory polynucleotide (I)
CC comprising an immunostimulatory sequence (ISS). Also described: (1) an
CC immunomodulatory composition comprising (1); (2) an immunomodulatory
CC polynucleotide/microcarrier (IMP/MC) complex, comprising (1) linked to a
CC biodegradable MC, where the MC is less than 10 micrometre in size; and
CC (3) a kit comprising (1). (1) has antiallergic, antiasthmatic, virucide,
CC antibacterial and protozoacide activities, and can be used as a modulator
CC of immune response. (1) is useful for modulating an immune response in an
CC individual suffering from disorders associated with a Th2-type immune
CC response, especially an allergy or asthma, or an infectious disease. (1)
CC is also useful for increasing interferon-gamma (IFN-gamma) in an
CC individual having idiopathic pulmonary fibrosis, or IFN-alpha in an
CC individual having a viral infection. (1) is further useful for
CC ameliorating a symptom of an infectious disease caused by a cellular
CC pathogen such as mycobacterial disease, malaria, leishmaniasis,
CC toxoplasmosis, schistosomiasis and clonorchiasis in an individual, or a
CC symptom of an immunoglobulin E (IgE)-related disorder, preferably an
CC allergy-related disorder, in particular asthma in an individual. The
CC present sequence represents an immunomodulatory oligonucleotide from the
XX present invention
XX
XX Sequence 13 BP; 2 A; 3 C; 4 G; 3 T; 0 U; 1 Other;
Query Match 100.0%; Score 10; DB 6; Length 13;
Best Local Similarity 100.0%; Pred. No. 4.7e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 CGAACGTTTCG 10
Db 4 CGAACGTTTCG 13

Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

RESULT 46
 ABQ75225/c
 ID ABQ75225 standard; DNA; 13 BP.
 XX
 AC ABQ75225;
 XX
 DT 05-NOV-2002 (first entry)
 XX
 DE ISS immunomodulatory oligonucleotide SEQ ID NO:99.
 XX
 KW Immunostimulatory sequence; ISS: immunomodulatory; immune response;
 KW allergy; asthma; infectious disease; interferon-gamma; IFN-gamma;
 KW idiopathic pulmonary fibrosis; viral infection; mycobacterial disease;
 KW malaria; leishmaniasis; toxoplasmosis; schistosomiasis; clonorchiasis;
 KW immunoglobulin B; IgE-related disorder; antiallergic; antiasthmatic;
 KW virucide; antibacterial; protozoacide; ss.
 XX
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT modified_base 2 /*tag= a
 FT /mod_base= OTHER
 FT /note= "5-bromocytosine"
 FT
 XX
 PN WO200252002-A2.
 XX
 PD 04-JUL-2002.
 XX
 PF 27-DEC-2001; 2001WO-US050821.
 XX
 PR 27-DEC-2000; 2000US-0258675P.
 XX
 PA (DYNA-) DYNAVAX TECHNOLOGIES CORP.
 XX
 PI Fearon KL; Dina D;
 XX
 XX WPI; 2002-657426/70.
 XX
 PT Immunomodulatory polynucleotide for modulating an immune response in a
 PT subject suffering from disorders associated with Th2-type immune
 PT response, e.g. allergy, or infectious disease, comprises an
 PT immunostimulatory sequence.
 XX
 PS Disclosure; Page 23; 95pp; English.
 XX
 CC The present invention describes an immunomodulatory polynucleotide (I)
 CC comprising an immunostimulatory sequence (ISS). Also described: (1) an
 CC immunomodulatory composition comprising (I); (2) an immunomodulatory
 CC polynucleotide/microcarrier (IMP/MC) complex, comprising (I) linked to a
 CC biodegradable MC, where the MC is less than 10 micrometre in size; and
 CC (3) a kit comprising (I). (I) has antiallergic, antiasthmatic, virucide,
 CC antibacterial and protozoacide activities, and can be used as a modulator
 CC of immune response. (I) is useful for modulating an immune response in an
 CC individual suffering from disorders associated with a Th2-type immune
 CC response, especially an allergy or asthma, or an infectious disease. (I)
 CC is also useful for increasing interferon-gamma (IFN-gamma) in an
 CC individual having idiopathic pulmonary fibrosis, or IFN-alpha in an
 CC individual having a viral infection. (I) is further useful for
 CC ameliorating a symptom of an infectious disease caused by a cellular
 CC pathogen such as mycobacterial disease, malaria, leishmaniasis,
 CC toxoplasmosis, schistosomiasis and clonorchiasis in an individual, or a
 CC symptom of an immunoglobulin E (IgE)-related disorder, preferably an
 CC allergy-related disorder, in particular asthma in an individual. The
 CC present sequence represents an immunomodulatory oligonucleotide from the
 CC present invention
 XX
 SQ Sequence 13 BP; 2 A; 3 C; 4 G; 3 T; 0 U; 1 Other;
 Query Match 100.0%; Score 10; DB 6; Length 13;
 Best Local Similarity 100.0%; Pred. No. 4.7e+03;

RESULT 47
 ADQ95397
 ID ADQ95397 standard; DNA; 13 BP.
 XX
 AC ADQ95397;
 XX
 DT 07-OCT-2004 (first entry)
 XX
 DE Branched immunomodulatory compound related oligonucleotide, SEQ ID 139.
 XX
 KW Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
 KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
 KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
 KW Tuberculostatic; Antileptotic; Antiparasitic; Antimalarial; Antitumor;
 KW Gastrointestinal; Nephrotropic; branched immunomodulatory compound;
 KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
 KW IFN-alpha; ss.
 XX
 OS Synthetic.
 XX
 PN WO2004058159-A2.
 XX
 PD 15-JUL-2004.
 XX
 PF 17-DEC-2003; 2003WO-US040417.
 XX
 PR 23-DEC-2002; 2002US-0436406P.
 XX
 PA (DYNA-) DYNAVAX TECHNOLOGIES CORP.
 XX
 PI Fearon KL;
 XX
 XX WPI; 2004-561515/54.
 XX
 PT New branched immunomodulatory compound comprising at least three nucleic
 PT acid moieties and at least one branch-point nucleoside, useful for
 PT modulating an immune response in individual suffering e.g. allergy.
 XX
 PS Example 5; SEQ ID NO 139; 183pp; English.
 XX
 CC The present invention relates to novel branched immunomodulatory
 CC compounds (BIC) comprising at least three nucleic acid moieties, at least
 CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
 CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
 CC e.g. the ability to stimulate interferon (IFN)-gamma production from
 CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
 CC alpha production from human peripheral blood mononuclear cells and the
 CC ability to stimulate B cell proliferation. The BIC compounds are useful
 CC for modulating an immune response in an individual suffering from a
 CC disorder associated with a T helper (Th) 2-type immune response e.g.
 CC allergy, allergy-induced asthma or an infectious disease; for increasing
 CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
 CC are also useful for immunomodulation of cells and individuals; in the
 CC fields of biomedicine and immunology; for the manufacture of a medicament
 CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
 CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
 CC ameliorating an Ige-related disorder in an individual. The disorders
 CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
 CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
 CC cancer; infectious disease resistant to humoral immune responses (e.g.
 CC diseases caused by mycobacterial infections and intracellular pathogens,
 CC cellular pathogens e.g. bacteria or protozoans or by subcellular
 CC pathogens e.g. viruses; mycobacterial diseases such as tuberculosis,
 CC leprosy or M. Marium or M. ulcerans infections; herpes viruses; diseases
 CC caused by intracellular parasites such as malaria; leishmaniasis,
 CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory

CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
 CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
 CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.

XX
 SQ Sequence 13 BP; 4 A; 3 C; 3 G; 3 T; 0 U; 0 Other;
 Query Match 100.0%; Score 10; DB 12; Length 13;
 Best Local Similarity 100.0%; Pred. No. 4.7e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
 |||||
 DB 2 CGAACGTTTCG 11

RESULT 48
 ADQ95397/c
 ID ADQ95397 standard; DNA; 13 BP.
 AC ADQ95397;
 XX
 DT 07-OCT-2004 (first entry)
 XX
 DE Branched immunomodulatory compound related oligonucleotide, SEQ ID 139.
 XX
 KW Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
 KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
 KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
 KW Tuberculosis; Antileptotic; Antiparasitic; Antimalarial; Antiulcer;
 KW Gastrointestinal; Nephrotropic; branched immunomodulatory compound;
 KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
 KW IFN-alpha; ss.
 XX
 OS Synthetic.
 XX
 PN WO2004058159-A2.
 XX
 PD 15-JUL-2004.
 XX
 PF 17-DEC-2003; 2003WO-US040417.
 XX
 PR 23-DEC-2002; 2002US-0436406P.
 XX
 PA (DYNA-) DYNAVAX TECHNOLOGIES CORP.
 XX
 PI Fearon KL;
 XX
 DR WPI; 2004-561515/54.
 XX
 XX New branched immunomodulatory compound comprising at least three nucleic
 PT acid moieties and at least one branch-point nucleoside, useful for
 PT modulating an immune response in individual suffering e.g. allergy.
 PS
 PS Example 5; SEQ ID NO 139; 183pp; English.
 XX

The present invention relates to novel branched immunomodulatory
 CC compounds (BIC) comprising at least three nucleic acid moieties, at least
 CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
 CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
 CC e.g. the ability to stimulate interferon (IFN)-gamma production from
 CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
 CC alpha production from human peripheral blood mononuclear cells and the
 CC ability to stimulate B cell proliferation. The BIC compounds are useful
 CC for modulating an immune response in an individual suffering from a
 CC disorder associated with a T helper (Th)2-type immune response e.g.
 CC allergy, allergy-induced asthma or an infectious disease; for increasing
 CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
 CC are also useful for immunomodulation of cells and individuals; in the
 CC fields of biomedicine and immunology; for the manufacture of a medicament
 CC for treating idiopathic pulmonary fibrosis, viral infection (e.g.
 CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
 CC ameliorating an IgB-related disorder in an individual. The disorders

CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
 CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
 CC cancer; infectious disease resistant to humoral immune responses (e.g.
 CC diseases caused by mycobacterial infections and intracellular pathogens,
 CC cellular pathogens e.g. bacteria or protozoans or by subcellular
 CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
 CC leprosy or M. Marimum or M. ulcerans infections; herpes viruses; diseases
 CC caused by intracellular parasites such as malaria; leishmaniasis,
 CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
 CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
 CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
 CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.

XX
 SQ Sequence 13 BP; 4 A; 3 C; 3 G; 3 T; 0 U; 0 Other;
 Query Match 100.0%; Score 10; DB 12; Length 13;
 Best Local Similarity 100.0%; Pred. No. 4.7e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
 |||||
 DB 11 CGAACGTTTCG 2

RESULT 49
 ADQ16823
 ID ADQ16823 standard; DNA; 13 BP.
 XX
 AC ADQ16823;
 XX
 DT 07-OCT-2004 (first entry)
 XX
 DE Immunomodulatory polynucleotide, SEQ ID NO 102.
 XX
 KW Immunomodulatory polynucleotide; IMP; palindromic sequence; dinucleotide;
 KW trinucleotide; antimicrobial; antiallergic; antiasthmatic;
 KW dermatological; antiinflammatory; ophthalmological; immunosuppressive;
 KW antibacterial; vasotropic; antiparasitic; virucide; hepatotropic;
 KW anti-HIV; cytostatic; antiulcer; nephrotropic; vaccine; prophylactic; immune;
 KW T helper; (Th)2-type immune response; interferon; IFN-alpha;
 KW interferon-gamma; interferon-alpha; type I interferon; IFN-alpha;
 KW IFN-omega; IFN-gamma; plasmacytoid dendritic cell; ss.
 XX
 OS Unidentified.
 XX
 PN WO2004058179-A2.
 XX
 PD 15-JUL-2004.
 XX
 PF 18-DEC-2003; 2003WO-US041001.
 XX
 PR 23-DEC-2002; 2002US-0436122P.
 PR 13-FEB-2003; 2003US-0447885P.
 PR 01-MAY-2003; 2003US-0467546P.
 XX
 XX (DYNA-) DYNAVAX TECHNOLOGIES.
 PA
 XX Dina D, Fearon KL, Marshall J;
 PI WPI; 2004-525782/50.
 XX
 XX Immunomodulatory polynucleotide useful for the treatment of e.g. atopic
 PT dermatitis comprises palindromic sequence comprising at least eight bases
 PT in length, which contains at least two dinucleotides and at least one
 PT trinucleotide.
 XX
 PS Example 1; SEQ ID NO 102; 119pp; English.
 XX

The invention relates to a novel immunomodulatory polynucleotide (IMP)
 CC comprising a palindromic sequence. The palindromic sequence comprises at
 CC least 8 bases in length, which contains at least two dinucleotides (CG),
 CC and at least one trinucleotide (TCG) at or near the 5' end of the

CC polynucleotide. The CG dinucleotides are separated by 0 - 5 bases. The 5' T of the (TCG)y is positioned 0 - 3 bases from the 5' end of the polynucleotide. The (TCG)y is separated from the 5' end of the palindromic sequence by 0 - 2 bases. The palindromic sequence includes all or part of the (TCG)y sequence, where y=1 or 2. The immunomodulatory polynucleotides have the following activities: antimicrobial, anti-allergic, antiasthmatic, dermatological, antiinflammatory, ophthalmological, immunosuppressive, antibacterial, vasotropic, antiparasitic, virucide, hepatotropic, anti-HIV, cytostatic, antiulcer, and nephrotropic. The immunomodulatory polynucleotides can be used for ameliorating a symptom of an infectious disease and IGE-related disorder. The IMP's may also be used for the treatment of a disorder associated with a T helper (TH)2-type immune response (e.g. allergies, allergy-induced asthma or atopic dermatitis), individuals receiving vaccines such as therapeutic vaccines (e.g. vaccines comprising an allergy epitope, a mycobacterial epitope or a tumour associated epitope) or prophylactic vaccines. The IMP's can also be used for the treatment of e.g. food allergies, rhinitis, atopic dermatitis, conjunctivitis, urticaria, shock, Hymenoptera sting allergies and drug allergies and parasitic infections; viral disease e.g. Hepatitis B, Hepatitis C, influenza, Acquired immunodeficiency syndrome (AIDS) and Herpes zoster; and cancer; idiopathic pulmonary fibrosis, scleroderma, cutaneous radiation-induced fibrosis, hepatic fibrosis including schistosomiasis-induced hepatic fibrosis, renal fibrosis. The IMP's may also be used to create a prophylactic vaccine to increase resistance to infection by bacterial or viral pathogens. The immunomodulatory polynucleotide modulates an immune response; or increases interferon-gamma; or interferon-alpha; effectively stimulates cytokines including type I interferons e.g. IFN-alpha and IFN-omega and IFN-gamma, production from human cells; effectively stimulates B cells to proliferate; and activates plasmacytoid dendritic cells to undergo maturation which can result in retardation of plasmacytoid dendritic cell apoptosis in culture. This polynucleotide sequence represents an immunomodulatory polynucleotide of the invention.

XX
SQ Sequence 13 BP; 3 A; 3 C; 4 G; 3 T; 0 U; 0 Other;
Query Match 100.0%; Score 10; DB 13; Length 13;
Best Local Similarity 100.0%; Pred. No. 4.7e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
DB |||||
2 CGAACGTTTCG 11

RESULT 50
ADQ16823/C
ID ADQ16823 standard; DNA; 13 BP.
XX
AC ADQ16823;
XX
DT 07-OCT-2004 (first entry)
XX
DE Immunomodulatory polynucleotide, SEQ ID No 102.
XX
KW Immunomodulatory polynucleotide; IMP; palindromic sequence; dinucleotide; trinucleotide; antimicrobial; anti-allergic; antiasthmatic; dermatological; antiinflammatory; ophthalmological; immunosuppressive; anti-bacterial; vasotropic; antiparasitic; virucide; hepatotropic; anti-HIV; cytostatic; antiulcer; nephrotropic; IGE-related disorder; T helper; (TH)2-type immune response; vaccine; prophylactic; immune; interferon-gamma; interferon-alpha; type I interferon; IFN-alpha; IFN-omega; IFN-gamma; plasmacytoid dendritic cell; ss.
XX
OS Unidentified.
XX
PN WO2004058179-A2.
XX
PD 15-JUL-2004.
XX
PF 18-DEC-2003; 2003WO-US041001.
XX

PR 23-DEC-2002; 2002US-0436122P.
PR 13-FEB-2003; 2003US-0447885P.
PR 01-MAY-2003; 2003US-0467546P.
XX
PA (DYNA-) DYNAVAX TECHNOLOGIES.
XX
PI Dina D, Fearon KL, Marshall J;
XX WPI; 2004-525782/50.
DR Immunomodulatory polynucleotide useful for the treatment of e.g. atopic dermatitis comprises palindromic sequence comprising at least eight bases in length, which contains at least two dinucleotides and at least one trinucleotide.
PT
PT
XX Example 1; SEQ ID NO 102; 119pp; English.
XX
PS The invention relates to a novel immunomodulatory polynucleotide (IMP) comprising a palindromic sequence. The palindromic sequence comprises at least 8 bases in length, which contains at least two dinucleotides (CG), and at least one trinucleotide (TCG)y at or near the 5' end of the polynucleotide. The CG dinucleotides are separated by 0 - 5 bases. The 5' T of the (TCG)y is positioned 0 - 3 bases from the 5' end of the polynucleotide. The (TCG)y is separated from the 5' end of the palindromic sequence by 0 - 2 bases. The palindromic sequence includes all or part of the (TCG)y sequence, where y=1 or 2. The immunomodulatory polynucleotides have the following activities: antimicrobial, anti-allergic, antiasthmatic, dermatological, antiinflammatory, ophthalmological, immunosuppressive, antibacterial, vasotropic, antiparasitic, virucide, hepatotropic, anti-HIV, cytostatic, antiulcer, and nephrotropic. The immunomodulatory polynucleotides can be used for ameliorating a symptom of an infectious disease and IGE-related disorder. The IMP's may also be used for the treatment of a disorder associated with a T helper (TH)2-type immune response (e.g. allergies, allergy-induced asthma or atopic dermatitis), individuals receiving vaccines such as therapeutic vaccines (e.g. vaccines comprising an allergy epitope, a mycobacterial epitope or a tumour associated epitope) or prophylactic vaccines. The IMP's can also be used for the treatment of e.g. food allergies, rhinitis, atopic dermatitis, conjunctivitis, urticaria, shock, Hymenoptera sting allergies and drug allergies and parasitic infections; viral disease e.g. Hepatitis B, Hepatitis C, influenza, Acquired immunodeficiency syndrome (AIDS) and Herpes zoster; and cancer; idiopathic pulmonary fibrosis, scleroderma, cutaneous radiation-induced fibrosis, hepatic fibrosis including schistosomiasis-induced hepatic fibrosis, renal fibrosis. The IMP's may also be used to create a prophylactic vaccine to increase resistance to infection by bacterial or viral pathogens. The immunomodulatory polynucleotide modulates an immune response; or increases interferon-gamma; or interferon-alpha; effectively stimulates cytokines including type I interferons e.g. IFN-alpha and IFN-omega and IFN-gamma, production from human cells; effectively stimulates B cells to proliferate; and activates plasmacytoid dendritic cells to undergo maturation which can result in retardation of plasmacytoid dendritic cell apoptosis in culture. This polynucleotide sequence represents an immunomodulatory polynucleotide of the invention.

XX
SQ Sequence 13 BP; 3 A; 3 C; 4 G; 3 T; 0 U; 0 Other;
Query Match 100.0%; Score 10; DB 13; Length 13;
Best Local Similarity 100.0%; Pred. No. 4.7e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
DB |||||
11 CGAACGTTTCG 2

RESULT 51
ABQ75377
ID ABQ75377 standard; DNA; 14 BP.
XX
AC ABQ75377;
XX

DT 05-NOV-2002 (first entry)
 XX ISS immunomodulatory oligonucleotide SEQ ID NO:98.
 DE
 XX
 XX Immunostimulatory sequence; ISS: immunomodulatory; immune response;
 KW allergy; asthma; infectious disease; interferon-gamma; IFN-gamma;
 KW idiopathic pulmonary fibrosis; viral infection; mycobacterial disease;
 KW malaria; leishmaniasis; toxoplasmosis; schistosomiasis; clonorchiasis;
 KW immunoglobulin E; IgE-related disorder; antiallergic; antiasthmatic;
 KW virucide; antibacterial; protozoacide; ss.
 XX
 OS Synthetic.
 XX
 XX WO200252002-A2.
 PN
 XX
 XX 04-JUL-2002.
 PD
 XX
 XX 27-DEC-2001; 2001WO-US050821.
 PF
 XX
 XX 27-DEC-2000; 2000US-0258675P.
 PR
 XX
 XX (DYNA-) DYNAX TECHNOLOGIES CORP.
 PA
 XX
 XX Fearon KL, Dina D;
 PI
 XX
 XX WPI; 2002-657426/70.
 DR
 XX
 XX Immunomodulatory polynucleotide for modulating an immune response in a
 PT subject suffering from disorders associated with Th2-type immune
 PT response, e.g. allergy, or infectious disease, comprises an
 PT immunostimulatory sequence.
 PT
 XX
 XX Disclosure; Page 23; 95pp; English.
 PS
 XX
 XX The present invention describes an immunomodulatory polynucleotide (I)
 CC comprising an immunostimulatory sequence (ISS). Also described: (1) an
 CC immunomodulatory composition comprising (I); (2) an immunomodulatory
 CC polynucleotide/microcarrier (IMP/MC) complex, comprising (I) linked to a
 CC biodegradable MC, where the MC is less than 10 micrometre in size; and
 CC (3) a kit comprising (I). (I) has antiallergic, antiasthmatic, virucide,
 CC antibacterial and protozoacide activities, and can be used as a modulator
 CC of immune response. (I) is useful for modulating an immune response in an
 CC individual suffering from disorders associated with a Th2-type immune
 CC response, especially an allergy or asthma, or an infectious disease. (I)
 CC is also useful for increasing interferon-gamma (IFN-gamma) in an
 CC individual having idiopathic pulmonary fibrosis, or IFN-alpha in an
 CC individual having a viral infection. (I) is further useful for
 CC ameliorating a symptom of an infectious disease caused by a cellular
 CC pathogen such as mycobacterial disease, malaria, leishmaniasis,
 CC toxoplasmosis, schistosomiasis and clonorchiasis in an individual, or a
 CC symptom of an immunoglobulin E (IgE)-related disorder, preferably an
 CC allergy-related disorder, in particular asthma in an individual. The
 CC present sequence represents an immunomodulatory oligonucleotide from the
 CC present invention
 XX
 SQ Sequence 14 BP; 2 A; 4 C; 4 G; 4 T; 0 U; 0 Other;
 Query Match 100.0%; Score 10; DB 6; Length 14;
 Best Local Similarity 100.0%; Pred. No. 4.7e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 CGAACGTTTCG 10
 DB |||||||||
 5 CGAACGTTTCG 14
 RESULT 52
 ABQ75377/c
 ID ABQ75377 standard; DNA; 14 BP.
 XX
 XX AC ABQ75377;
 XX
 XX 05-NOV-2002 (first entry)
 DT 05-NOV-2002 (first entry)
 XX ISS immunomodulatory oligonucleotide SEQ ID NO:98.
 DE
 XX
 XX Immunostimulatory sequence; ISS: immunomodulatory; immune response;
 KW allergy; asthma; infectious disease; interferon-gamma; IFN-gamma;
 KW idiopathic pulmonary fibrosis; viral infection; mycobacterial disease;
 KW malaria; leishmaniasis; toxoplasmosis; schistosomiasis; clonorchiasis;
 KW immunoglobulin E; IgE-related disorder; antiallergic; antiasthmatic;
 KW virucide; antibacterial; protozoacide; ss.
 XX
 OS Synthetic.
 XX
 XX WO200252002-A2.
 PN
 XX
 XX 04-JUL-2002.
 PD
 XX
 XX 27-DEC-2001; 2001WO-US050821.
 PF
 XX
 XX 27-DEC-2000; 2000US-0258675P.
 PR
 XX
 XX (DYNA-) DYNAX TECHNOLOGIES CORP.
 PA
 XX
 XX Fearon KL, Dina D;
 PI
 XX
 XX WPI; 2002-657426/70.
 DR
 XX
 XX Immunomodulatory polynucleotide for modulating an immune response in a
 PT subject suffering from disorders associated with Th2-type immune
 PT response, e.g. allergy, or infectious disease, comprises an
 PT immunostimulatory sequence.
 PT
 XX
 XX Disclosure; Page 23; 95pp; English.
 PS
 XX
 XX The present invention describes an immunomodulatory polynucleotide (I)
 CC comprising an immunostimulatory sequence (ISS). Also described: (1) an
 CC immunomodulatory composition comprising (I); (2) an immunomodulatory
 CC polynucleotide/microcarrier (IMP/MC) complex, comprising (I) linked to a
 CC biodegradable MC, where the MC is less than 10 micrometre in size; and
 CC (3) a kit comprising (I). (I) has antiallergic, antiasthmatic, virucide,
 CC antibacterial and protozoacide activities, and can be used as a modulator
 CC of immune response. (I) is useful for modulating an immune response in an
 CC individual suffering from disorders associated with a Th2-type immune
 CC response, especially an allergy or asthma, or an infectious disease. (I)
 CC is also useful for increasing interferon-gamma (IFN-gamma) in an
 CC individual having idiopathic pulmonary fibrosis, or IFN-alpha in an
 CC individual having a viral infection. (I) is further useful for
 CC ameliorating a symptom of an infectious disease caused by a cellular
 CC pathogen such as mycobacterial disease, malaria, leishmaniasis,
 CC toxoplasmosis, schistosomiasis and clonorchiasis in an individual, or a
 CC symptom of an immunoglobulin E (IgE)-related disorder, preferably an
 CC allergy-related disorder, in particular asthma in an individual. The
 CC present sequence represents an immunomodulatory oligonucleotide from the
 CC present invention
 XX
 SQ Sequence 14 BP; 2 A; 4 C; 4 G; 4 T; 0 U; 0 Other;
 Query Match 100.0%; Score 10; DB 6; Length 14;
 Best Local Similarity 100.0%; Pred. No. 4.7e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 CGAACGTTTCG 10
 DB |||||||||
 5 CGAACGTTTCG 14
 RESULT 52
 ABQ75377/c
 ID ABQ75377 standard; DNA; 14 BP.
 XX
 XX AC ABQ75377;
 XX
 XX 05-NOV-2002 (first entry)
 DT 05-NOV-2002 (first entry)
 XX ISS immunomodulatory oligonucleotide SEQ ID NO:98.
 DE
 XX
 XX Immunostimulatory sequence; ISS: immunomodulatory; immune response;
 KW allergy; asthma; infectious disease; interferon-gamma; IFN-gamma;
 KW idiopathic pulmonary fibrosis; viral infection; mycobacterial disease;
 KW malaria; leishmaniasis; toxoplasmosis; schistosomiasis; clonorchiasis;
 KW immunoglobulin E; IgE-related disorder; antiallergic; antiasthmatic;
 KW virucide; antibacterial; protozoacide; ss.
 XX
 OS Synthetic.
 XX
 XX WO200252002-A2.
 PN
 XX
 XX 04-JUL-2002.
 PD
 XX
 XX 27-DEC-2001; 2001WO-US050821.
 PF
 XX
 XX 27-DEC-2000; 2000US-0258675P.
 PR
 XX
 XX (DYNA-) DYNAX TECHNOLOGIES CORP.
 PA
 XX
 XX Fearon KL, Dina D;
 PI
 XX
 XX WPI; 2002-657426/70.
 DR
 XX
 XX Immunomodulatory polynucleotide for modulating an immune response in a
 PT subject suffering from disorders associated with Th2-type immune
 PT response, e.g. allergy, or infectious disease, comprises an
 PT immunostimulatory sequence.
 PT
 XX
 XX Disclosure; Page 23; 95pp; English.
 PS
 XX
 XX The present invention describes an immunomodulatory polynucleotide (I)
 CC comprising an immunostimulatory sequence (ISS). Also described: (1) an
 CC immunomodulatory composition comprising (I); (2) an immunomodulatory
 CC polynucleotide/microcarrier (IMP/MC) complex, comprising (I) linked to a
 CC biodegradable MC, where the MC is less than 10 micrometre in size; and
 CC (3) a kit comprising (I). (I) has antiallergic, antiasthmatic, virucide,
 CC antibacterial and protozoacide activities, and can be used as a modulator
 CC of immune response. (I) is useful for modulating an immune response in an
 CC individual suffering from disorders associated with a Th2-type immune
 CC response, especially an allergy or asthma, or an infectious disease. (I)
 CC is also useful for increasing interferon-gamma (IFN-gamma) in an
 CC individual having idiopathic pulmonary fibrosis, or IFN-alpha in an
 CC individual having a viral infection. (I) is further useful for
 CC ameliorating a symptom of an infectious disease caused by a cellular
 CC pathogen such as mycobacterial disease, malaria, leishmaniasis,
 CC toxoplasmosis, schistosomiasis and clonorchiasis in an individual, or a
 CC symptom of an immunoglobulin E (IgE)-related disorder, preferably an
 CC allergy-related disorder, in particular asthma in an individual. The
 CC present sequence represents an immunomodulatory oligonucleotide from the
 CC present invention
 XX
 SQ Sequence 14 BP; 2 A; 4 C; 4 G; 4 T; 0 U; 0 Other;
 Query Match 100.0%; Score 10; DB 6; Length 14;
 Best Local Similarity 100.0%; Pred. No. 4.7e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 CGAACGTTTCG 10
 DB |||||||||
 5 CGAACGTTTCG 14
 RESULT 53
 ADB88895
 ID ADB88895 standard; DNA; 14 BP.
 XX
 XX AC ADB88895;
 XX
 XX 04-DEC-2003 (first entry)
 DT 04-DEC-2003 (first entry)
 XX

DE Chimeric immunomodulatory compound DNA sequence, SEQ ID No 98.

XX Chimeric immunomodulatory compound; CIC; immunomodulatory activity;
 KW spacer moiety; linear hexaethylene glycol structure; HEG; immune;
 KW Th2-type; allergy; allergy-induced asthma; infectious disease; IFN-gamma;
 KW IFN-alpha; idiopathic pulmonary fibrosis; viral infection; ameliorating;
 KW immunoglobulin E; IGE; allergy; cancer;
 KW stimulating cellular immune system cell; ss.

XX Synthetic.

XX WO2003000922-A2.

XX 03-JAN-2003.

XX 21-JUN-2002; 2002WO-US020025.

XX 21-JUN-2001; 2001US-0299883P.

XX 23-APR-2002; 2002US-0375253P.

XX (DYNA-) DYNAVAX TECHNOLOGIES CORP.

XX Fearon KL, Dina D, Tuck SF;

XX WPI; 2003-210159/20.

XX Novel chimeric immunomodulatory compound having immunomodulatory
 PT activity, useful for modulating an immune response and for treating
 PT cancer, has nucleic acid moieties and non-nucleic acid spacer moieties.

PS Disclosure; Page 35; 224pp; English.

XX The invention relates to a novel chimeric immunomodulatory compound (CIC)
 CC having immunomodulatory activity, comprising two or more nucleic acid
 CC moieties and one or more non-nucleic acid spacer moieties, where at least
 CC one non-nucleic acid spacer moiety is covalently joined to two nucleic
 CC acid moieties, where the spacer is not a polypeptide, and at least one
 CC nucleic acid moiety comprises the sequence 5'-CG-3'. The chimeric
 CC immunomodulatory compounds more specifically contain the nucleic acid
 CC spacer moieties of linear hexaethylene glycol structure (HEG) subunits.
 CC CIC's are useful for modulating an immune response in an individual,
 CC where the individual suffers from a disorder associated with a Th2-type
 CC immune response which is an allergy or allergy-induced asthma, and an
 CC infectious disease. CIC is also useful for increasing IFN-gamma, and an
 CC alpha; in an individual, where the individual has idiopathic pulmonary
 CC fibrosis, or a viral infection. CIC's are useful for ameliorating a
 CC symptom of an infectious disease, or an immunoglobulin E (IGE)-related
 CC disorder in an individual, where the IGE-related disorder is allergy, or
 CC an allergy-related disorder. CIC's are also useful for treating cancer
 CC and can be used for stimulating cellular immune system cells production
 CC in an individual. This polynucleotide sequence represents a DNA sequence
 CC which is a nucleic acid moiety part of a chimeric immunomodulatory compound
 CC of the invention.

XX SQ Sequence 14 BP; 2 A; 4 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 100.0%; Score 10; DB 9; Length 14;

Best Local Similarity 100.0%; Pred. No. 4.7e+03;

Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10

Db 5 CGAACGTTTCG 14

RESULT 54

ADB88895/c

ID ADB88895 standard; DNA; 14 BP.

XX ADB88895;

XX 04-DEC-2003 (first entry)

XX

DE Chimeric immunomodulatory compound DNA sequence, SEQ ID No 98.

XX Chimeric immunomodulatory compound; CIC; immunomodulatory activity;
 KW spacer moiety; linear hexaethylene glycol structure; HEG; immune;
 KW Th2-type; allergy; allergy-induced asthma; infectious disease; IFN-gamma;
 KW IFN-alpha; idiopathic pulmonary fibrosis; viral infection; ameliorating;
 KW immunoglobulin E; IGE; allergy; cancer;
 KW stimulating cellular immune system cell; ss.

XX Synthetic.

XX WO2003000922-A2.

XX 03-JAN-2003.

XX 21-JUN-2002; 2002WO-US020025.

XX 21-JUN-2001; 2001US-0299883P.

XX 23-APR-2002; 2002US-0375253P.

XX (DYNA-) DYNAVAX TECHNOLOGIES CORP.

XX Fearon KL, Dina D, Tuck SF;

XX WPI; 2003-210159/20.

XX Novel chimeric immunomodulatory compound having immunomodulatory
 PT activity, useful for modulating an immune response and for treating
 PT cancer, has nucleic acid moieties and non-nucleic acid spacer moieties.

PS Disclosure; Page 35; 224pp; English.

XX The invention relates to a novel chimeric immunomodulatory compound (CIC)
 CC having immunomodulatory activity, comprising two or more nucleic acid
 CC moieties and one or more non-nucleic acid spacer moieties, where at least
 CC one non-nucleic acid spacer moiety is covalently joined to two nucleic
 CC acid moieties, where the spacer is not a polypeptide, and at least one
 CC nucleic acid moiety comprises the sequence 5'-CG-3'. The chimeric
 CC immunomodulatory compounds more specifically contain the nucleic acid
 CC spacer moieties of linear hexaethylene glycol structure (HEG) subunits.
 CC CIC's are useful for modulating an immune response in an individual,
 CC where the individual suffers from a disorder associated with a Th2-type
 CC immune response which is an allergy or allergy-induced asthma, and an
 CC infectious disease. CIC is also useful for increasing IFN-gamma, and an
 CC alpha; in an individual, where the individual has idiopathic pulmonary
 CC fibrosis, or a viral infection. CIC's are useful for ameliorating a
 CC symptom of an infectious disease, or an immunoglobulin E (IGE)-related
 CC disorder in an individual, where the IGE-related disorder is allergy, or
 CC an allergy-related disorder. CIC's are also useful for treating cancer
 CC and can be used for stimulating cellular immune system cells production
 CC in an individual. This polynucleotide sequence represents a DNA sequence
 CC which is a nucleic acid moiety part of a chimeric immunomodulatory compound
 CC of the invention.

XX SQ Sequence 14 BP; 2 A; 4 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 100.0%; Score 10; DB 9; Length 14;

Best Local Similarity 100.0%; Pred. No. 4.7e+03;

Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10

Db 14 CGAACGTTTCG 5

RESULT 55

ADB88901

ID ADB88901 standard; DNA; 14 BP.

XX ADB88901;

XX 04-DEC-2003 (first entry)

XX

Chimeric immunomodulatory compound DNA sequence, SEQ ID NO 104.

XX chimeric immunomodulatory compound; CIC; immunomodulatory activity;
 KW spacer moiety; linear hexaethylene glycol structure; HEG; immune;
 KW Th2-type; allergy; allergy-induced asthma; infectious disease; IFN-gamma;
 KW IFN-alpha; idiopathic pulmonary fibrosis; viral infection; ameliorating;
 KW immunoglobulin E; IgE; allergy; cancer;
 KW stimulating cellular immune system cell; ss.
 XX
 OS Synthetic.

XX WO200300922-A2.

XX 03-JAN-2003.

XX 21-JUN-2002; 2002WO-US020025.

XX 21-JUN-2001; 2001US-0299883P.

XX 23-APR-2002; 2002US-0375253P.

XX (DYNA-) DYNAVAX TECHNOLOGIES CORP.

XX Fearon KL, Dina D, Tuck SF;
 PI WPI; 2003-210159/20.

XX Novel chimeric immunomodulatory compound having immunomodulatory

PT activity, useful for modulating an immune response and for treating
 PT cancer, has nucleic acid moieties and non-nucleic acid spacer moieties.
 XX
 PS Disclosure; Page 36; 224pp; English.

XX The invention relates to a novel chimeric immunomodulatory compound (CIC)
 CC having immunomodulatory activity, comprising two or more nucleic acid
 CC moieties and one or more non-nucleic acid spacer moieties, where at least
 CC one non-nucleic acid spacer moiety is covalently joined to two nucleic
 CC acid moieties, where the spacer is not a polypeptide, and at least one
 CC nucleic acid moiety comprises the sequence 5'-CG-3'. The chimeric
 CC immunomodulatory compounds more specifically contain the nucleic acid
 CC spacer moieties of linear hexaethylene glycol structure (HEG) subunits.
 CC CIC's are useful for modulating an immune response in an individual,
 CC where the individual suffers from a disorder associated with a Th2-type
 CC immune response which is an allergy or allergy-induced asthma, and an
 CC infectious disease. CIC is also useful for increasing IFN-gamma, or IFN-
 CC alpha; in an individual, where the individual has idiopathic pulmonary
 CC fibrosis, or a viral infection. CIC's are useful for ameliorating a
 CC symptom of an infectious disease, or an immunoglobulin E (IgE)-related
 CC disorder in an individual, where the IgE-related disorder is allergy, or
 CC an allergy-related disorder. CIC's are also useful for treating cancer
 CC and can be used for stimulating cellular immune system cells production
 CC in an individual. This polynucleotide sequence represents a DNA sequence
 CC of the invention.

XX Sequence 14 BP; 2 A; 4 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 100.0%; Score 10; DB 9; Length 14;
 Best Local Similarity 100.0%; Pred. No. 4.7e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10

Db 5 CGAACGTTTCG 14

RESULT 56

ID ADB88901/C

XX ADB88901 standard; DNA; 14 BP.

XX ADB88901;

XX 04-DEC-2003 (first entry)

XX

Chimeric immunomodulatory compound DNA sequence, SEQ ID NO 104.

XX chimeric immunomodulatory compound; CIC; immunomodulatory activity;
 KW spacer moiety; linear hexaethylene glycol structure; HEG; immune;
 KW Th2-type; allergy; allergy-induced asthma; infectious disease; IFN-gamma;
 KW IFN-alpha; idiopathic pulmonary fibrosis; viral infection; ameliorating;
 KW immunoglobulin E; IgE; allergy; cancer;
 KW stimulating cellular immune system cell; ss.
 XX
 OS Synthetic.

XX WO200300922-A2.

XX 03-JAN-2003.

XX 21-JUN-2002; 2002WO-US020025.

XX 21-JUN-2001; 2001US-0299883P.

XX 23-APR-2002; 2002US-0375253P.

XX (DYNA-) DYNAVAX TECHNOLOGIES CORP.

XX Fearon KL, Dina D, Tuck SF;
 PI WPI; 2003-210159/20.

XX Novel chimeric immunomodulatory compound having immunomodulatory

PT activity, useful for modulating an immune response and for treating
 PT cancer, has nucleic acid moieties and non-nucleic acid spacer moieties.
 XX
 PS Disclosure; Page 36; 224pp; English.

XX The invention relates to a novel chimeric immunomodulatory compound (CIC)
 CC having immunomodulatory activity, comprising two or more nucleic acid
 CC moieties and one or more non-nucleic acid spacer moieties, where at least
 CC one non-nucleic acid spacer moiety is covalently joined to two nucleic
 CC acid moieties, where the spacer is not a polypeptide, and at least one
 CC nucleic acid moiety comprises the sequence 5'-CG-3'. The chimeric
 CC immunomodulatory compounds more specifically contain the nucleic acid
 CC spacer moieties of linear hexaethylene glycol structure (HEG) subunits.
 CC CIC's are useful for modulating an immune response in an individual,
 CC where the individual suffers from a disorder associated with a Th2-type
 CC immune response which is an allergy or allergy-induced asthma, and an
 CC infectious disease. CIC is also useful for increasing IFN-gamma, or IFN-
 CC alpha; in an individual, where the individual has idiopathic pulmonary
 CC fibrosis, or a viral infection. CIC's are useful for ameliorating a
 CC symptom of an infectious disease, or an immunoglobulin E (IgE)-related
 CC disorder in an individual, where the IgE-related disorder is allergy, or
 CC an allergy-related disorder. CIC's are also useful for treating cancer
 CC and can be used for stimulating cellular immune system cells production
 CC in an individual. This polynucleotide sequence represents a DNA sequence
 CC of the invention.

XX Sequence 14 BP; 2 A; 4 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 100.0%; Score 10; DB 9; Length 14;
 Best Local Similarity 100.0%; Pred. No. 4.7e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10

Db 14 CGAACGTTTCG 5

RESULT 57

ID ADK67588

XX ADK67588 standard; DNA; 14 BP.

XX ADK67588;

XX 06-MAY-2004 (first entry)

XX

DE Immunostimulant oligonucleotide 14TCG, for immunomodulatory composition.
 XX Immunomodulator; immunostimulant; vaccine; ss.
 XX Synthetic.
 XX WO2004014322-A2.
 XX PD 19-FEB-2004.
 XX PF 12-AUG-2003; 2003WO-US025415.
 XX PR 12-AUG-2002; 2002US-0402968P.
 XX PA (DYNA-) DYNAVAX TECHNOLOGIES CORP.
 XX PI Van Nest G, Tuck S;
 XX PS WPI; 2004-238627/22.
 XX
 XX Immunomodulatory composition useful for modulating immune responses in
 PT individuals, comprises immunomodulatory particles or a particulate
 PT composition made by mixing cationic condensing agent and an
 PT immunomodulatory compound.
 XX
 XX Example 4; SEQ ID NO 18; 90pp; English.
 XX The present sequence is that of an immunomodulatory compound (IMC),
 CC designated 14TCG, that can be used in novel immunomodulatory compositions
 CC of the invention. The IMC may contain modifications of the 3'OH or 5'OH
 CC group, the nucleotide base, the sugar component and phosphate group.
 CC Novel immunomodulatory compositions of the invention comprise a cationic
 CC condensing agent, an IMC comprising the nucleotide sequence 5'-CG-3', and
 CC a stabilising agent. The compositions form particles which have increased
 CC immunomodulatory activity as compared to IMCs not formulated in the
 CC compositions of the invention. The immunomodulatory compositions can be
 CC used for immunomodulation of an individual, e.g. when the individual
 CC suffers from a disorder associated with a Th2-type immune response (e.g.
 CC allergies or allergy-induced asthma), is receiving vaccines such as
 CC therapeutic vaccines (e.g. vaccines comprising an allergy epitope, a
 CC mycobacterial epitope or a tumour associated epitope) or prophylactic
 CC vaccines, suffers from cancer, suffers from an infectious disease or is
 CC at risk of exposure to an infectious agent. In an example from the
 CC invention, IMC 14TCG was used to examine immunomodulation of human cells
 CC with particulate compositions incorporating a panel of IMC
 CC oligonucleotides.
 XX
 XX SQ Sequence 14 BP; 2 A; 4 C; 4 G; 4 T; 0 U; 0 Other;
 Query Match 100.0%; Score 10; DB 12; Length 14;
 Best Local Similarity 100.0%; Pred. No. 4.7e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 1 CGAACGTTTCG 10
 Db 5 CGAACGTTTCG 14
 RESULT 58
 ADK67588/c
 ID ADK67588 standard; DNA; 14 BP.
 XX
 XX AC ADK67588;
 XX
 XX DT 06-MAY-2004 (first entry)
 XX
 XX DE Immunostimulant oligonucleotide 14TCG, for immunomodulatory composition.
 XX Immunomodulator; immunostimulant; vaccine; ss.
 XX Synthetic.
 XX WO2004014322-A2.

XX 19-FEB-2004.
 XX PF 12-AUG-2003; 2003WO-US025415.
 XX PR 12-AUG-2002; 2002US-0402968P.
 XX PA (DYNA-) DYNAVAX TECHNOLOGIES CORP.
 XX PI Van Nest G, Tuck S;
 XX PS WPI; 2004-238627/22.
 XX
 XX Immunomodulatory composition useful for modulating immune responses in
 PT individuals, comprises immunomodulatory particles or a particulate
 PT composition made by mixing cationic condensing agent and an
 PT immunomodulatory compound.
 XX
 XX Example 4; SEQ ID NO 18; 90pp; English.
 XX The present sequence is that of an immunomodulatory compound (IMC),
 CC designated 14TCG, that can be used in novel immunomodulatory compositions
 CC of the invention. The IMC may contain modifications of the 3'OH or 5'OH
 CC group, the nucleotide base, the sugar component and phosphate group.
 CC Novel immunomodulatory compositions of the invention comprise a cationic
 CC condensing agent, an IMC comprising the nucleotide sequence 5'-CG-3', and
 CC a stabilising agent. The compositions form particles which have increased
 CC immunomodulatory activity as compared to IMCs not formulated in the
 CC compositions of the invention. The immunomodulatory compositions can be
 CC used for immunomodulation of an individual, e.g. when the individual
 CC suffers from a disorder associated with a Th2-type immune response (e.g.
 CC allergies or allergy-induced asthma), is receiving vaccines such as
 CC therapeutic vaccines (e.g. vaccines comprising an allergy epitope, a
 CC mycobacterial epitope or a tumour associated epitope) or prophylactic
 CC vaccines, suffers from cancer, suffers from an infectious disease or is
 CC at risk of exposure to an infectious agent. In an example from the
 CC invention, IMC 14TCG was used to examine immunomodulation of human cells
 CC with particulate compositions incorporating a panel of IMC
 CC oligonucleotides.
 XX
 XX SQ Sequence 14 BP; 2 A; 4 C; 4 G; 4 T; 0 U; 0 Other;
 Query Match 100.0%; Score 10; DB 12; Length 14;
 Best Local Similarity 100.0%; Pred. No. 4.7e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 1 CGAACGTTTCG 10
 Db 14 CGAACGTTTCG 5
 RESULT 59
 ADQ95381
 ID ADQ95381 standard; DNA; 14 BP.
 XX
 XX AC ADQ95381;
 XX
 XX DT 07-OCT-2004 (first entry)
 XX
 XX DE Branched immunomodulatory compound related oligonucleotide, SEQ ID 123.
 XX
 XX KW Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
 KW Virucide; Antiinflammatory; Hepatotrophic; Anti-HIV; Auditory;
 KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
 KW Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Anticancer;
 KW Gastrointestinal; Nephrotropic; branched immunomodulatory compound;
 KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
 XX IFN-alpha; ss.
 XX Synthetic.
 XX
 XX FT Key Location/Qualifiers
 modified_base 5

```

FT FT      /*tag= a
FT FT      /mod_base= OTHER
FT FT      /note= "c= 5-bromocytosine"
XX XX
PN WO2004058159-A2.
XX XX
PD 15-JUL-2004.
XX XX
PF 17-DEC-2003; 2003WO-US040417.
XX XX
PR 23-DEC-2002; 2002US-0436406P.
XX XX
PA (DYNA-) DYNAVAX TECHNOLOGIES CORP.
XX XX
PI Fearon KL;
XX XX
XX WPI; 2004-561515/54.
XX XX
DR New branched immunomodulatory compound comprising at least three nucleic
XX acid moieties and at least one branch-point nucleoside, useful for
XX modulating an immune response in individual suffering e.g. allergy.
XX
PS Disclosure; SEQ ID NO 123; 183pp; English.
XX
CC The present invention relates to novel branched immunomodulatory
CC compounds (BIC) comprising at least three nucleic acid moieties, at least
CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
CC e.g. the ability to stimulate interferon (IFN)-gamma production from
CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
CC alpha production from human peripheral blood mononuclear cells and the
CC ability to stimulate B cell proliferation. The BIC compounds are useful
CC for modulating an immune response in an individual suffering from a
CC disorder associated with a T helper (Th)2-type immune response e.g.
CC allergy, allergy-induced asthma or an infectious disease; for increasing
CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
CC are also useful for immunomodulation of cells and individuals; in the
CC fields of biomedicine and immunology; for the manufacture of a medicament
CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
CC ameliorating an IGE-related disorder in an individual. The disorders
CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
CC cancer; infectious disease resistant to humoral immune responses (e.g.
CC diseases caused by mycobacterial infections and intracellular pathogens,
CC cellular pathogens e.g. bacteria or protozoans or by subcellular
CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
CC leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases
CC caused by intracellular parasites such as malaria; leishmaniasis,
CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
CC the BIC compounds of the invention.
XX
SQ Sequence 14 BP; 2 A; 4 C; 4 G; 4 T; 0 U; 0 Other;
Query Match 100.0%; Score 10; DB 12; Length 14;
Best Local Similarity 100.0%; Pred. No. 4.7e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 CGAACGTTTCG 10
Db 5 CGAACGTTTCG 14
RESULT 60
ADQ95381/c
ID ADQ95381 standard; DNA; 14 BP.
XX
AC ADQ95381;
XX
DT 07-OCT-2004 (first entry)

```

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XX XX
DE Branched immunomodulatory compound related oligonucleotide, SEQ ID 123.
XX
KW Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
XX Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
XX Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Antiulcer;
KW Gastrointestinal; Nephrotropic; Branched immunomodulatory compound;
XX immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
XX IFN-alpha; ss.
XX
OS Synthetic.
XX
XX Key Location/Qualifiers
XX modified_base 5 /*tag= a
XX FT /mod_base= OTHER
XX FT /note= "c= 5-bromocytosine"
XX
XX WO2004058159-A2.
XX
XX 15-JUL-2004.
XX
XX 17-DEC-2003; 2003WO-US040417.
XX
XX 23-DEC-2002; 2002US-0436406P.
XX
XX (DYNA-) DYNAVAX TECHNOLOGIES CORP.
XX
XX Fearon KL;
XX
XX WPI; 2004-561515/54.
XX
XX New branched immunomodulatory compound comprising at least three nucleic
XX acid moieties and at least one branch-point nucleoside, useful for
XX modulating an immune response in individual suffering e.g. allergy.
XX
PS Disclosure; SEQ ID NO 123; 183pp; English.
XX
CC The present invention relates to novel branched immunomodulatory
CC compounds (BIC) comprising at least three nucleic acid moieties, at least
CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
CC e.g. the ability to stimulate interferon (IFN)-gamma production from
CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
CC alpha production from human peripheral blood mononuclear cells and the
CC ability to stimulate B cell proliferation. The BIC compounds are useful
CC for modulating an immune response in an individual suffering from a
CC disorder associated with a T helper (Th)2-type immune response e.g.
CC allergy, allergy-induced asthma or an infectious disease; for increasing
CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
CC are also useful for immunomodulation of cells and individuals; in the
CC fields of biomedicine and immunology; for the manufacture of a medicament
CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
CC ameliorating an IGE-related disorder in an individual. The disorders
CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
CC cancer; infectious disease resistant to humoral immune responses (e.g.
CC diseases caused by mycobacterial infections and intracellular pathogens,
CC cellular pathogens e.g. bacteria or protozoans or by subcellular
CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
CC leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases
CC caused by intracellular parasites such as malaria; leishmaniasis,
CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
CC the BIC compounds of the invention.
XX
SQ Sequence 14 BP; 2 A; 4 C; 4 G; 4 T; 0 U; 0 Other;
Query Match 100.0%; Score 10; DB 12; Length 14;

```

CC	hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
CC	ameliorating an IGE-related disorder in an individual. The disorders
CC	includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
CC	eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
CC	cancer; infectious disease resistant to humoral immune responses (e.g.
CC	diseases caused by mycobacterial infections and intracellular pathogens,
CC	cellular pathogens e.g. bacteria or protozoans or by subcellular
CC	pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
CC	leprosy or M. marinum or M. ulcerans infections; herpes viruses; diseases
CC	caused by intracellular parasites such as malaria; leishmaniasis,
CC	toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
CC	disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
CC	induced fibrosis, hepatic fibrosis including schistosomiasis-induced
CC	hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
CC	the BIC compounds of the invention.
XX	
XX	
SQ	Sequence 14 BP; 2 A; 4 C; 4 G; 4 T; 0 U; 0 Other;
SQ	
Query Match	100.0%; Score 10; DB 12; Length 14;
Best Local Similarity	100.0%; Pred. No. 4.7e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0	
QY	1 CGAAGCTTCG 10
Db	5 CGAAGCTTCG 14
RESULT 62	
ADQ95391/c	
ID	ADQ95391 standard; DNA; 14 BP.
XX	
AC	ADQ95391;
XX	
DT	
DT	07-OCT-2004 (first entry)
XX	
DE	Branched immunomodulatory compound related oligonucleotide, SEQ ID 133.
XX	
KW	Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
KW	Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
KW	Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
KW	Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Antiulcer;
KW	Gastrointestinal; Nephrotropic; branched immunomodulatory compound;
KW	immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
KW	IFN-alpha; ss.
XX	
OS	Synthetic.
XX	
Key	Location/Qualifiers
FT	modified_base 5
FT	/*tag= a
FT	/mod_base= OTHER
FT	/note= "C= 5-bromocytosine"
FT	modified_base 9
FT	/*tag= b
FT	/mod_base= OTHER
FT	/note= "C= 5-bromocytosine"
XX	
PN	WO2004058159-A2.
XX	
PD	15-JUL-2004.
XX	
PP	17-DEC-2003; 2003WO-US040417.
XX	
PR	23-DEC-2002; 2002US-0436406P.
XX	
PA	(DYNA-) DYNAXV TECHNOLOGIES CORP.
XX	
PI	Fearon KL;
XX	
DR	WPI; 2004-561515/54.
XX	
PT	New branched immunomodulatory compound comprising at least three nucleic
PT	acid moieties and at least one branch-point nucleoside, useful for

PT modulating an immune response in individual suffering e.g. allergy.
 PS Disclosure; SEQ ID NO 133; 183pp; English.
 XX
 CC The present invention relates to novel branched immunomodulatory
 CC compounds (BIC) comprising at least three nucleic acid moieties, at least
 CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
 CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
 CC e.g. the ability to stimulate interferon (IFN)-gamma production from
 CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
 CC alpha production from human peripheral blood mononuclear cells and the
 CC ability to stimulate B cell proliferation. The BIC compounds are useful
 CC for modulating an immune response in an individual suffering from a
 CC disorder associated with a T helper (Th)2-type immune response e.g.
 CC allergy, allergy-induced asthma or an infectious disease; for increasing
 CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
 CC are also useful for immunomodulation of cells and individuals; in the
 CC fields of biomedicine and immunology; for the manufacture of a medicament
 CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
 CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
 CC ameliorating an IGE-related disorder in an individual. The disorders
 CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
 CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
 CC cancer; infectious disease resistant to humoral immune responses (e.g.
 CC diseases caused by mycobacterial infections and intracellular pathogens,
 CC cellular pathogens e.g. bacteria or protozoans or by subcellular
 CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
 CC leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases
 CC caused by intracellular parasites such as malaria; leishmaniasis,
 CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
 CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
 CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
 CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.
 XX
 SQ Sequence 14 BP; 2 A; 4 C; 4 G; 4 T; 0 U; 0 Other;
 Query Match 100.0%; Score 10; DB 12; Length 14;
 Best Local Similarity 100.0%; Pred. No. 4.7e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 1 CGAACGTTTCG 10
 Db 14 CGAACGTTTCG 5
 RESULT 63
 ADQ95358
 ID ADQ95358 standard; DNA; 14 BP.
 XX
 AC ADQ95358;
 XX
 XX 07-OCT-2004 (first entry)
 XX
 XX Branched immunomodulatory compound related oligonucleotide, SEQ ID 100.
 XX
 KW Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
 KW Virucide; Antiinflammatory; Hepatotropic; Anti-Flu; Auditory;
 KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
 KW Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Antiulcer;
 KW Gastrointestinal; Nephrotropic; Branched immunomodulatory compound;
 KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
 KW IFN-alpha; ss.
 XX
 OS Synthetic.
 XX
 XX Key Location/Qualifiers
 FH modified_base 2 /*tag= a
 FT /mod_base= OTHER
 FT /note= "c= 5-bromocytosine"
 FT 5
 FT modified_base 5
 FT /*tag= b

FT
 FT
 XX
 PN /mod_base= OTHER
 /note= "c= 5-bromocytosine"
 WO2004058159-A2.
 XX
 PD 15-JUL-2004.
 XX
 PF 17-DEC-2003; 2003WO-US040417.
 XX
 PR 23-DEC-2002; 2002US-0436406P.
 XX
 PA (DYNA-) DYNAXVAX TECHNOLOGIES CORP.
 PI Fearon KL;
 XX
 DR WPI; 2004-561515/54.
 XX
 XX New branched immunomodulatory compound comprising at least three nucleic
 PT acid moieties and at least one branch-point nucleoside, useful for
 PT modulating an immune response in individual suffering e.g. allergy.
 XX
 PS Disclosure; SEQ ID NO 100; 183pp; English.
 XX
 CC The present invention relates to novel branched immunomodulatory
 CC compounds (BIC) comprising at least three nucleic acid moieties, at least
 CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
 CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
 CC e.g. the ability to stimulate interferon (IFN)-gamma production from
 CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
 CC alpha production from human peripheral blood mononuclear cells and the
 CC ability to stimulate B cell proliferation. The BIC compounds are useful
 CC for modulating an immune response in an individual suffering from a
 CC disorder associated with a T helper (Th)2-type immune response e.g.
 CC allergy, allergy-induced asthma or an infectious disease; for increasing
 CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
 CC are also useful for immunomodulation of cells and individuals; in the
 CC fields of biomedicine and immunology; for the manufacture of a medicament
 CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
 CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
 CC ameliorating an IGE-related disorder in an individual. The disorders
 CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
 CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
 CC cancer; infectious disease resistant to humoral immune responses (e.g.
 CC diseases caused by mycobacterial infections and intracellular pathogens,
 CC cellular pathogens e.g. bacteria or protozoans or by subcellular
 CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
 CC leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases
 CC caused by intracellular parasites such as malaria; leishmaniasis,
 CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
 CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
 CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
 CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.
 XX
 SQ Sequence 14 BP; 2 A; 4 C; 4 G; 4 T; 0 U; 0 Other;
 Query Match 100.0%; Score 10; DB 12; Length 14;
 Best Local Similarity 100.0%; Pred. No. 4.7e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 1 CGAACGTTTCG 10
 Db 5 CGAACGTTTCG 14
 RESULT 64
 ADQ95358/c
 ID ADQ95358 standard; DNA; 14 BP.
 XX
 AC ADQ95358;
 XX
 XX 07-OCT-2004 (first entry)
 XX

Branched immunomodulatory compound related oligonucleotide, SEQ ID 100.

Antiallergic; Antiasthmatic; Antibacterial; Immunomodulatory; Respiratory; Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory; Dermatologic; Immunosuppressive; Cytostatic; Protozoacide; Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Antiulcer; Gastrointestinal; Nephrotropic; branched immunomodulatory compound; immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha; IFN-alpha; ss.

Synthetic.

Key modified_base 2 Location/Qualifiers
/*tag= a
/mod_base= OTHER
/note= "c= 5-bromocytosine"

modified_base 5
/*tag= b
/mod_base= OTHER
/note= "c= 5-bromocytosine"

WO2004058159-A2.

15-JUL-2004.

17-DEC-2003; 2003WO-US040417.

23-DEC-2002; 2002US-0436406P.

(DYNA-) DYNAVAX TECHNOLOGIES CORP.

Fearon KL;

WPI; 2004-561515/54.

New branched immunomodulatory compound comprising at least three nucleic acid moieties and at least one branch-point nucleoside, useful for modulating an immune response in individual suffering e.g. allergy.

Disclosure; SEQ ID NO 100; 183pp; English.

The present invention relates to novel branched immunomodulatory compounds (BIC) comprising at least three nucleic acid moieties, at least one of which comprises the nucleotide sequence 5'-CG-3', and at least one branch-point nucleoside. The BIC compounds has immunomodulatory activity e.g. the ability to stimulate interferon (IFN)-gamma production from human peripheral blood mononuclear cells, the ability to stimulate IFN-alpha production from human peripheral blood mononuclear cells and the ability to stimulate B cell proliferation. The BIC compounds are useful for modulating an immune response in an individual suffering from a disorder associated with a T helper (Th)2-type immune response e.g. allergy, allergy-induced asthma or an infectious disease; for increasing secretion of IFN-gamma by blood cells in an individual. The BIC compounds are also useful for immunomodulation of cells and individuals; in the fields of biomedicine and immunology; for the manufacture of a medicament; for treating idiopathic pulmonary fibrosis, viral infection (e.g. hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for ameliorating an Igs-related disorder in an individual. The disorders includes atopic dermatitis, eosinophilic gastrointestinal inflammation, eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis; cancer; infectious disease resistant to humoral immune responses (e.g. diseases caused by mycobacterial infections and intracellular pathogens, cellular pathogens e.g. bacteria or protozoans or by subcellular pathogens e.g. viruses); mycobacterial diseases such as tuberculosis, leprosy or M. Marium or Mycobacterium infections; herpes viruses; diseases caused by intracellular parasites such as malaria; leishmaniasis, toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory disorders e.g. ulcerative colitis, scleroderma, cutaneous radiation-induced fibrosis, hepatic fibrosis including schistosomiasis-induced hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in the BIC compounds of the invention.

Seq Sequence 14 BP; 2 A; 4 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 100.0%; Score 10; DB 12; Length 14;
Best Local Similarity 100.0%; Pred. No. 4.7e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
| | | | | | | | | |
Db 14 CGAACGTTTCG 5

RESULT 65
ADQ95356
ID ADQ95356 standard; DNA; 14 BP.
XX
AC ADQ95356;
XX
DT 07-OCT-2004 (first entry)
XX
DE
XX
KW Branched immunomodulatory compound related oligonucleotide, SEQ ID 98.
KW Antiallergic; Antiasthmatic; Antibacterial; Immunomodulatory; Respiratory;
KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
KW Dermatologic; Immunosuppressive; Cytostatic; Protozoacide;
KW Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Antiulcer;
KW Gastrointestinal; Nephrotropic; branched immunomodulatory compound;
KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
KW IFN-alpha; ss.
XX
OS Synthetic.
XX
FN WO2004058159-A2.
XX
PD 15-JUL-2004.
XX
PF 17-DEC-2003; 2003WO-US040417.
XX
PR 23-DEC-2002; 2002US-0436406P.
XX
PA (DYNA-) DYNAVAX TECHNOLOGIES CORP.
XX
PI Fearon KL;
XX
DR WPI; 2004-561515/54.
XX
PT New branched immunomodulatory compound comprising at least three nucleic acid moieties and at least one branch-point nucleoside, useful for modulating an immune response in individual suffering e.g. allergy.

Disclosure; SEQ ID NO 98; 183pp; English.

The present invention relates to novel branched immunomodulatory compounds (BIC) comprising at least three nucleic acid moieties, at least one of which comprises the nucleotide sequence 5'-CG-3', and at least one branch-point nucleoside. The BIC compounds has immunomodulatory activity e.g. the ability to stimulate interferon (IFN)-gamma production from human peripheral blood mononuclear cells, the ability to stimulate IFN-alpha production from human peripheral blood mononuclear cells and the ability to stimulate B cell proliferation. The BIC compounds are useful for modulating an immune response in an individual suffering from a disorder associated with a T helper (Th)2-type immune response e.g. allergy, allergy-induced asthma or an infectious disease; for increasing secretion of IFN-gamma by blood cells in an individual. The BIC compounds are also useful for immunomodulation of cells and individuals; in the fields of biomedicine and immunology; for the manufacture of a medicament; for treating idiopathic pulmonary fibrosis, viral infection (e.g. hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for ameliorating an Igs-related disorder in an individual. The disorders includes atopic dermatitis, eosinophilic gastrointestinal inflammation, eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis; cancer; infectious disease resistant to humoral immune responses (e.g. diseases caused by mycobacterial infections and intracellular pathogens, cellular pathogens e.g. bacteria or protozoans or by subcellular

CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis;
 CC leprosy or M. Marinum or M.ulcerans infections; herpes viruses; diseases
 CC caused by intracellular parasites such as malaria; AIDS and herpes zoster); for
 CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammation
 CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
 CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
 CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.

XX Sequence 14 BP; 2 A; 4 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 100.0%; Score 10; DB 12; Length 14;
 Best Local Similarity 100.0%; Pred. No. 4.7e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
 Db 5 CGAACGTTTCG 14
 |||||

RESULT 66
 ADQ95356/c
 ID ADQ95356 standard; DNA; 14 BP.

AC ADQ95356;

XX 07-OCT-2004 (first entry)

XX Branched immunomodulatory compound related oligonucleotide, SEQ ID 98.

XX Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
 KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
 KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
 KW Tuberculosis; Antileprotic; Antiparasitic; Antimalarial; Antitumor;
 KW Gastrointestinal; Nephrotropic; Branched immunomodulatory compound;
 KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
 KW IFN-alpha; ss.

XX Synthetic.

XX WO2004058159-A2.

XX 15-JUL-2004.

XX 17-DEC-2003; 2003WO-US040417.

XX 23-DEC-2002; 2002US-0436406P.

XX (DYNA-) DYNAX TECHNOLOGIES CORP.

XX Fearon KL;

XX WPI; 2004-561515/54.

XX New branched immunomodulatory compound comprising at least three nucleic
 PT acid moieties and at least one branch-point nucleoside, useful for
 PT modulating an immune response in individual suffering e.g. allergy.

XX Disclosure; SEQ ID NO 98; 183pp; English.

XX The present invention relates to novel branched immunomodulatory
 CC compounds (BIC) comprising at least three nucleic acid moieties, at least
 CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
 CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
 CC e.g. the ability to stimulate interferon (IFN)-gamma production from
 CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
 CC alpha production from human peripheral blood mononuclear cells and the
 CC ability to stimulate B cell proliferation. The BIC compounds are useful
 CC for modulating an immune response in an individual suffering from a
 CC disorder associated with a T helper (Th)2-type immune response e.g.
 CC allergy, allergy-induced asthma or an infectious disease; for increasing
 CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
 CC are also useful for immunomodulation of cells and individuals; in the

CC fields of biomedicine and immunology; for the manufacture of a medicament
 CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
 CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
 CC ameliorating an IGE-related disorder in an individual. The disorders
 CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
 CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
 CC cancer; infectious disease resistant to humoral immune responses (e.g.
 CC diseases caused by mycobacterial infections and intracellular pathogens,
 CC cellular pathogens e.g. bacteria or protozoans or by subcellular
 CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
 CC leprosy or M. Marinum or M.ulcerans infections; herpes viruses; diseases
 CC caused by intracellular parasites such as malaria; leishmaniasis,
 CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
 CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
 CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
 CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.

XX Sequence 14 BP; 2 A; 4 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 100.0%; Score 10; DB 12; Length 14;
 Best Local Similarity 100.0%; Pred. No. 4.7e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10

Db 14 CGAACGTTTCG 5
 |||||

RESULT 67

ADQ95390
 ID ADQ95390 standard; DNA; 14 BP.

XX ADQ95390;

XX 07-OCT-2004 (first entry)

XX Branched immunomodulatory compound related oligonucleotide, SEQ ID 132.

XX Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
 KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
 KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
 KW Tuberculosis; Antileprotic; Antiparasitic; Antimalarial; Antitumor;
 KW Gastrointestinal; Nephrotropic; Branched immunomodulatory compound;
 KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
 KW IFN-alpha; ss.

XX Synthetic.

XX Key Location/Qualifiers
 FH modified_base 5 /tag= a

FT /mod_base= OTHER

FT /note= "c= 5-bromocytosine"

FT modified_base 9 /tag= b

FT /mod_base= OTHER

FT /note= "c= 5-bromocytosine"

XX WO2004058159-A2.

XX 15-JUL-2004.

XX 17-DEC-2003; 2003WO-US040417.

XX 23-DEC-2002; 2002US-0436406P.

XX (DYNA-) DYNAX TECHNOLOGIES CORP.

XX Fearon KL;

XX WPI; 2004-561515/54.

PT New branched immunomodulatory compound comprising at least three nucleic
 PT acid moieties and at least one branch-point nucleoside, useful for
 PT modulating an immune response in individual suffering e.g. allergy.
 XX
 PS Disclosure; SEQ ID NO 132; 183pp; English.
 XX
 CC The present invention relates to novel branched immunomodulatory
 CC compounds (BIC) comprising at least three nucleic acid moieties, at least
 CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
 CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
 CC e.g. the ability to stimulate interferon (IFN)-gamma production from
 CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
 CC alpha production from human peripheral blood mononuclear cells and the
 CC ability to stimulate B cell proliferation. The BIC compounds are useful
 CC for modulating an immune response in an individual suffering from a
 CC disorder associated with a T helper (Th)2-type immune response e.g.
 CC allergy, allergy-induced asthma or an infectious disease; for increasing
 CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
 CC are also useful for immunomodulation of cells and individuals; in the
 CC fields of biomedicine and immunology; for the manufacture of a medicament
 CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
 CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
 CC ameliorating an Igg-related disorder in an individual. The disorders
 CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
 CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
 CC cancer; infectious disease resistant to humoral immune responses (e.g.
 CC diseases caused by mycobacterial infections and intracellular pathogens,
 CC cellular pathogens e.g. bacteria or protozoans or by subcellular
 CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
 CC leprosy or M. Marimum or M. ulcerans infections; herpes viruses; diseases
 CC caused by intracellular parasites such as malaria; leishmaniasis,
 CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
 CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
 CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
 CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.
 XX
 SQ Sequence 14 BP; 2 A; 4 C; 4 G; 3 T; 1 U; 0 Other;
 Query Match 100.0%; Score 10; DB 12; Length 14;
 Best Local Similarity 90.0%; Pred. No. 4.7e+03;
 Matches 9; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
 Qy 1 CGAACGTTTCG 10
 Db 5 CGAACGTTTCG 14
 RESULT 68
 ID ADQ95390/c
 XX ADQ95390 standard; DNA; 14 BP.
 AC ADQ95390;
 XX
 DT 07-OCT-2004 (first entry)
 XX
 DE Branched immunomodulatory compound related oligonucleotide, SEQ ID 132.
 XX
 KW Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
 KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
 KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
 KW Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Antiulcer;
 KW Gastrointestinal; Nephrotropic; Branched immunomodulatory compound;
 KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
 KW IFN-alpha; ss.
 XX
 OS Synthetic.
 XX
 FH Key Location/Qualifiers
 FT modified_base 5 /*tag= a
 FT /mod_base= OTHER
 FT /note= "C= 5-bromocytosine"

FT modified_base 9 /*tag= b
 FT /mod_base= OTHER
 FT /note= "C= 5-bromocytosine"
 XX
 PN WO2004058159-A2.
 XX
 PD 15-JUL-2004.
 XX
 PF 17-DEC-2003; 2003WO-US040417.
 XX
 PR 23-DEC-2002; 2002US-0436406P.
 XX
 PA (DYNA-) DYNAVAX TECHNOLOGIES CORP.
 XX
 PI Fearon KL;
 XX
 DR WPI; 2004-561515/54.
 XX
 PT New branched immunomodulatory compound comprising at least three nucleic
 PT acid moieties and at least one branch-point nucleoside, useful for
 PT modulating an immune response in individual suffering e.g. allergy.
 XX
 PS Disclosure; SEQ ID NO 132; 183pp; English.
 XX
 CC The present invention relates to novel branched immunomodulatory
 CC compounds (BIC) comprising at least three nucleic acid moieties, at least
 CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
 CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
 CC e.g. the ability to stimulate interferon (IFN)-gamma production from
 CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
 CC alpha production from human peripheral blood mononuclear cells and the
 CC ability to stimulate B cell proliferation. The BIC compounds are useful
 CC for modulating an immune response in an individual suffering from a
 CC disorder associated with a T helper (Th)2-type immune response e.g.
 CC allergy, allergy-induced asthma or an infectious disease; for increasing
 CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
 CC are also useful for immunomodulation of cells and individuals; in the
 CC fields of biomedicine and immunology; for the manufacture of a medicament
 CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
 CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
 CC ameliorating an Igg-related disorder in an individual. The disorders
 CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
 CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
 CC cancer; infectious disease resistant to humoral immune responses (e.g.
 CC diseases caused by mycobacterial infections and intracellular pathogens,
 CC cellular pathogens e.g. bacteria or protozoans or by subcellular
 CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
 CC leprosy or M. Marimum or M. ulcerans infections; herpes viruses; diseases
 CC caused by intracellular parasites such as malaria; leishmaniasis,
 CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
 CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
 CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
 CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.
 XX
 SQ Sequence 14 BP; 2 A; 4 C; 4 G; 3 T; 1 U; 0 Other;
 Query Match 100.0%; Score 10; DB 12; Length 14;
 Best Local Similarity 100.0%; Pred. No. 4.7e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 1 CGAACGTTTCG 10
 Db 14 CGAACGTTTCG 5
 RESULT 69
 ID ADQ95394
 XX ADQ95394 standard; DNA; 14 BP.
 AC ADQ95394;
 XX

DT XX 07-OCT-2004 (first entry)

DE XX Branched immunomodulatory compound related oligonucleotide, SEQ ID 136.

XX XX Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;

KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;

KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;

KW Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Antiulcer;

KW Gastrointestinal; Nephrotropic; branched immunomodulatory compound;

KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;

KW IFN-alpha; ss.

XX OS Synthetic.

XX XX Key Location/Qualifiers

PH modified_base 1

FT /mod_base= OTHER

FT /note= "5'-T is attached to the 3' position of a branch

FT point adenosine, RA, which is further attached to two

FT oligonucleotides, SEQ ID 135 at the 5' position of RA,

FT and SEQ ID 137 at the 2' position of RA"

XX XX WO2004058159-A2.

XX XX 15-JUL-2004.

XX PF 17-DEC-2003; 2003WO-US040417.

XX PR 23-DEC-2002; 2002US-0436406P.

XX PA (DYNA-) DYNAVAX TECHNOLOGIES CORP.

XX PI Fearon KL;

XX DR WPI; 2004-561515/54.

XX PT New branched immunomodulatory compound comprising at least three nucleic

PT acid moieties and at least one branch-point nucleoside, useful for

PT modulating an immune response in individual suffering e.g. allergy.

XX PS Example 5; SEQ ID NO 136; 183pp; English.

XX CC The present invention relates to novel branched immunomodulatory

CC compounds (BIC) comprising at least three nucleic acid moieties, at least

CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one

CC branch-point nucleoside. The BIC compounds has immunomodulatory activity

CC e.g. the ability to stimulate interferon (IFN)-gamma production from

CC human peripheral blood mononuclear cells, the ability to stimulate IFN-

CC alpha production from human peripheral blood mononuclear cells and the

CC ability to stimulate B cell proliferation. The BIC compounds are useful

CC for modulating an immune response in an individual suffering from a

CC disorder associated with a T helper (Th)2-type immune response e.g.

CC allergy, allergy-induced asthma or an infectious disease; for increasing

CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds

CC are also useful for immunomodulation of cells and individuals; in the

CC fields of biomedicine and immunology; for the manufacture of a medicament

CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.

CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for

CC ameliorating an IGE-related disorder in an individual. The disorders

CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,

CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;

CC cancer; infectious disease resistant to humoral immune responses (e.g.

CC diseases caused by mycobacterial infections and intracellular pathogens,

CC cellular pathogens e.g. bacteria or protozoans or by subcellular

CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,

CC leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases

CC caused by intracellular parasites such as malaria; leishmaniasis;

CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory

CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation

CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced

CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in

CC the BIC compounds of the invention.

XX SQ Sequence 14 BP; 3 A; 3 C; 3 G; 5 T; 0 U; 0 Other;

XX Query Match 100.0%; Score 10; DB 12; Length 14;

XX Best Local Similarity 100.0%; Pred. No. 4.7e+03;

XX Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10

Db |||||

4 CGAACGTTTCG 13

RESULT 70

ADQ95394/c

ID ADQ95394 standard; DNA; 14 BP.

XX AC ADQ95394;

XX DT 07-OCT-2004 (first entry)

XX DE Branched immunomodulatory compound related oligonucleotide, SEQ ID 136.

XX XX Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;

KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;

KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;

KW Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Antiulcer;

KW Gastrointestinal; Nephrotropic; branched immunomodulatory compound;

KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;

KW IFN-alpha; ss.

XX OS Synthetic.

XX XX Key Location/Qualifiers

PH modified_base 1

FT /mod_base= OTHER

FT /note= "5'-T is attached to the 3' position of a branch

FT point adenosine, RA, which is further attached to two

FT oligonucleotides, SEQ ID 135 at the 5' position of RA,

FT and SEQ ID 137 at the 2' position of RA"

XX XX WO2004058159-A2.

XX XX 15-JUL-2004.

XX PF 17-DEC-2003; 2003WO-US040417.

XX PR 23-DEC-2002; 2002US-0436406P.

XX PA (DYNA-) DYNAVAX TECHNOLOGIES CORP.

XX PI Fearon KL;

XX DR WPI; 2004-561515/54.

XX PT New branched immunomodulatory compound comprising at least three nucleic

PT acid moieties and at least one branch-point nucleoside, useful for

PT modulating an immune response in individual suffering e.g. allergy.

XX PS Example 5; SEQ ID NO 136; 183pp; English.

XX CC The present invention relates to novel branched immunomodulatory

CC compounds (BIC) comprising at least three nucleic acid moieties, at least

CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one

CC branch-point nucleoside. The BIC compounds has immunomodulatory activity

CC e.g. the ability to stimulate interferon (IFN)-gamma production from

CC human peripheral blood mononuclear cells, the ability to stimulate IFN-

CC alpha production from human peripheral blood mononuclear cells and the

CC ability to stimulate B cell proliferation. The BIC compounds are useful

CC for modulating an immune response in an individual suffering from a

CC disorder associated with a T helper (Th)2-type immune response e.g.

CC allergy, allergy-induced asthma or an infectious disease; for increasing

CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds

CC are also useful for immunomodulation of cells and individuals; in the

CC fields of biomedicine and immunology; for the manufacture of a medicament

CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.

CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for

CC ameliorating an IGE-related disorder in an individual. The disorders

CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,

CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;

CC cancer; infectious disease resistant to humoral immune responses (e.g.

CC diseases caused by mycobacterial infections and intracellular pathogens,

CC cellular pathogens e.g. bacteria or protozoans or by subcellular

CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,

CC leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases

CC caused by intracellular parasites such as malaria; leishmaniasis;

CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory

CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation

CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced

CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in

CC the BIC compounds of the invention.

CC are also useful for immunomodulation of cells and individuals; in the
 CC fields of biomedicine and immunology; for the manufacture of a medicament
 CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
 CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
 CC ameliorating an Igg-related disorder in an individual. The disorders
 CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
 CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
 CC cancer; infectious disease resistant to humoral immune responses (e.g.
 CC diseases caused by mycobacterial infections and intracellular pathogens,
 CC cellular pathogens e.g. bacteria or protozoans or by subcellular
 CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
 CC leprosy or M. Marium or M. ulcerans infections; herpes viruses; diseases
 CC caused by intracellular parasites such as malaria; leishmaniasis,
 CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
 CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
 CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
 CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.

XX SQ Sequence 14 BP; 3 A; 3 C; 3 G; 5 T; 0 U; 0 Other;

Query Match 100.0%; Score 10; DB 12; Length 14;
 Best Local Similarity 100.0%; Pred. No. 4.7e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
 Db 13 CGAACGTTTCG 4

RESULT 71

ADQ95395
 ID ADQ95395 standard; DNA; 14 BP.

XX AC ADQ95395;

XX DT 07-OCT-2004 (first entry)

XX DE Branched immunomodulatory compound related oligonucleotide, SEQ ID 137.

XX KW Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
 KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
 KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
 KW Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Antiulcer;
 KW Gastrointestinal; Nephrotropic; branched immunomodulatory compound;
 KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
 KW IFN-alpha; ss.

XX OS Synthetic.

XX FH Key Location/Qualifiers

FT modified_base 14

FT /*tag= a

FT /mod_base= OTHER

FT /note= "T-3' is attached to the 2' position of a branch
 point adenosine, rA, which is further attached to two
 oligonucleotides, SEQ ID 135 at the 5' position of rA and
 SEQ ID 136 at the 3' position of rA"

XX FN WO2004058159-A2.

XX PD 15-JUL-2004.

XX PF 17-DEC-2003; 2003WO-US040417.

XX PR 23-DEC-2002; 2002US-0436406P.

XX PA (DYNA-) DYNVAX TECHNOLOGIES CORP.

XX PI Fearon KL;

XX DR WPI; 2004-561515/54.

XX

PT New branched immunomodulatory compound comprising at least three nucleic
 PT acid moieties and at least one branch-point nucleoside, useful for
 PT modulating an immune response in individual suffering e.g. allergy.

XX Example 5; SEQ ID NO 137; 183pp; English.

XX The present invention relates to novel branched immunomodulatory
 CC compounds (BIC) comprising at least three nucleic acid moieties, at least
 CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
 CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
 CC e.g. the ability to stimulate interferon (IFN)-gamma production from
 CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
 CC alpha production from human peripheral blood mononuclear cells and the
 CC ability to stimulate B cell proliferation. The BIC compounds are useful
 CC for modulating an immune response in an individual suffering from a
 CC disorder associated with a T helper (Th)2-type immune response e.g.
 CC allergy, allergy-induced asthma or an infectious disease; for increasing
 CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
 CC are also useful for immunomodulation of cells and individuals; in the
 CC fields of biomedicine and immunology; for the manufacture of a medicament
 CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
 CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
 CC ameliorating an Igg-related disorder in an individual. The disorders
 CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
 CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
 CC cancer; infectious disease resistant to humoral immune responses (e.g.
 CC diseases caused by mycobacterial infections and intracellular pathogens,
 CC cellular pathogens e.g. bacteria or protozoans or by subcellular
 CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
 CC leprosy or M. Marium or M. ulcerans infections; herpes viruses; diseases
 CC caused by intracellular parasites such as malaria; leishmaniasis,
 CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
 CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
 CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
 CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.

XX SQ Sequence 14 BP; 4 A; 3 C; 3 G; 4 T; 0 U; 0 Other;

Query Match 100.0%; Score 10; DB 12; Length 14;
 Best Local Similarity 100.0%; Pred. No. 4.7e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
 Db 2 CGAACGTTTCG 11

RESULT 72

ADQ95395/c

ID ADQ95395 standard; DNA; 14 BP.

XX AC ADQ95395;

XX DT 07-OCT-2004 (first entry)

XX DE Branched immunomodulatory compound related oligonucleotide, SEQ ID 137.

XX KW Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
 KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
 KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
 KW Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Antiulcer;
 KW Gastrointestinal; Nephrotropic; branched immunomodulatory compound;
 KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
 KW IFN-alpha; ss.

XX OS Synthetic.

XX FH Key Location/Qualifiers

FT modified_base 14

FT /*tag= a

FT /mod_base= OTHER

FT /note= "T-3' is attached to the 2' position of a branch

point adenosine, rA, which is further attached to two oligonucleotides, SEQ ID 135 at the 5' position of rA and SEQ ID 136 at the 3' position of rA"

XX DE point adenosine, rA, which is further attached to two
XX FT oligonucleotides, SEQ ID 135 at the 5' position of rA and
XX FT SEQ ID 136 at the 3' position of rA"
XX PN WO2004058159-A2.
XX PD 15-JUL-2004.
XX PP 17-DEC-2003; 2003WO-US040417.
XX PR 23-DEC-2002; 2002US-0436406P.
XX PA (DYNA-) DYNAVAX TECHNOLOGIES CORP.
XX PI Fearon KL;
XX DR WPI; 2004-561515/54.
XX XX New branched immunomodulatory compound comprising at least three nucleic
XX PT acid moieties and at least one branch-point nucleoside, useful for
XX PT modulating an immune response in individual suffering e.g. allergy.
XX PS Example 5; SEQ ID NO 137; 183pp; English.
XX CC The present invention relates to novel branched immunomodulatory
XX CC compounds (BIC) comprising at least three nucleic acid moieties, at least
XX CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
XX CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
XX CC e.g. the ability to stimulate interferon (IFN)-gamma production from
XX CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
XX CC alpha production from human peripheral blood mononuclear cells and the
XX CC ability to stimulate B cell proliferation. The BIC compounds are useful
XX CC for modulating an immune response in an individual suffering from a
XX CC disorder associated with a T helper (Th)2-type immune response e.g.
XX CC allergy, allergy-induced asthma or an infectious disease; for increasing
XX CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
XX CC are also useful for immunomodulation of cells and individuals; in the
XX CC fields of biomedicine and immunology; for the manufacture of a medicament
XX CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
XX CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
XX CC ameliorating an IGE-related disorder in an individual. The disorders
XX CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
XX CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
XX CC cancer; infectious disease resistant to humoral immune responses (e.g.
XX CC diseases caused by mycobacterial infections and intracellular pathogens,
XX CC cellular pathogens e.g. bacteria or protozoans or by subcellular
XX CC leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases
XX CC caused by intracellular parasites such as malaria; leishmaniasis,
XX CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
XX CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
XX CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
XX CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
XX CC the BIC compounds of the invention.
XX SQ Sequence 14 BP; 4 A; 3 C; 3 G; 4 T; 0 U; 0 Other;
Query Match 100.0%; Score 10; DB 12; Length 14;
Best Local Similarity 100.0%; Pred. No. 4.7e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 CGAACGTTGC 10
| | | | |
Db 11 CGAACGTTGC 2
RESULT 73
ADQ95362
ID ADQ95362 standard; DNA; 14 BP.
XX AC
XX AC ADQ95362;
XX DT 07-OCT-2004 (first entry)

XX DE Branched immunomodulatory compound related oligonucleotide, SEQ ID 104.
XX KW Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
KW Viricide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
KW Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Antiulcer;
KW Gastrointestinal; Nephrotropic; Branched immunomodulatory compound;
KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
XX IFN-alpha; ss.
XX OS Synthetic.
XX XX WO2004058159-A2.
XX PN 15-JUL-2004.
XX PD 17-DEC-2003; 2003WO-US040417.
XX PP 23-DEC-2002; 2002US-0436406P.
XX PR (DYNA-) DYNAVAX TECHNOLOGIES CORP.
XX XX Fearon KL;
XX PI WPI; 2004-561515/54.
XX DR New branched immunomodulatory compound comprising at least three nucleic
XX XX acid moieties and at least one branch-point nucleoside, useful for
XX PT modulating an immune response in individual suffering e.g. allergy.
XX XX Disclosure; SEQ ID NO 104; 183pp; English.
XX CC The present invention relates to novel branched immunomodulatory
XX CC compounds (BIC) comprising at least three nucleic acid moieties, at least
XX CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
XX CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
XX CC e.g. the ability to stimulate interferon (IFN)-gamma production from
XX CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
XX CC alpha production from human peripheral blood mononuclear cells and the
XX CC ability to stimulate B cell proliferation. The BIC compounds are useful
XX CC for modulating an immune response in an individual suffering from a
XX CC disorder associated with a T helper (Th)2-type immune response e.g.
XX CC allergy, allergy-induced asthma or an infectious disease; for increasing
XX CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
XX CC are also useful for immunomodulation of cells and individuals; in the
XX CC fields of biomedicine and immunology; for the manufacture of a medicament
XX CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
XX CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
XX CC ameliorating an IGE-related disorder in an individual. The disorders
XX CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
XX CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
XX CC cancer; infectious disease resistant to humoral immune responses (e.g.
XX CC diseases caused by mycobacterial infections and intracellular pathogens,
XX CC cellular pathogens e.g. bacteria or protozoans or by subcellular
XX CC leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases
XX CC caused by intracellular parasites such as malaria; leishmaniasis,
XX CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
XX CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
XX CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
XX CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
XX CC the BIC compounds of the invention.
XX SQ Sequence 14 BP; 2 A; 4 C; 4 G; 4 T; 0 U; 0 Other;
Query Match 100.0%; Score 10; DB 12; Length 14;
Best Local Similarity 100.0%; Pred. No. 4.7e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 CGAACGTTGC 10
| | | | |
Db 5 CGAACGTTGC 14

CC as therapeutic vaccines (e.g. vaccines comprising an allergy epitope, a
 CC mycobacterial epitope or a tumour associated epitope) or prophylactic
 CC vaccines. The IMP's can also be used for the treatment of e.g. food
 CC allergies, rhinitis, atopic dermatitis, conjunctivitis, urticaria, shock,
 CC Hymenoptera sting allergies and drug allergies and parasitic infections;
 CC viral disease e.g. Hepatitis B, Hepatitis C, influenza, Acquired
 CC immunodeficiency syndrome (AIDS) and Herpes zoster; and cancer;
 CC inflammatory disorder e.g. ulcerative colitis; fibrotic disorder e.g.
 CC idiopathic pulmonary fibrosis, scleroderma, cutaneous radiation-induced
 CC fibrosis, hepatic fibrosis including schistosomiasis-induced hepatic
 CC fibrosis, renal fibrosis. The IMP's may also be used to create a
 CC prophylactic vaccine to increase resistance to infection by bacterial or
 CC viral pathogens. The immunomodulatory polynucleotide modulates an immune
 CC response; or increases interferon-gamma; or interferon-alpha; effectively
 CC stimulates cytokines including type I interferons e.g. IFN-alpha and IFN-
 CC omega and IFN-gamma, production from human cells; effectively stimulates
 CC B cells to proliferate; and activates plasmacytoid dendritic cells to
 CC undergo maturation which can result in retardation of plasmacytoid
 CC dendritic cell apoptosis in culture. This polynucleotide sequence
 CC represents an immunomodulatory polynucleotide of the invention.

XX Sequence 14 BP; 2 A; 4 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 100.0%; Score 10; DB 13; Length 14;
 Best Local Similarity 100.0%; Pred. No. 4.7e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
 Db 5 CGAACGTTTCG 14
 |||||

RESULT 76

ADQ16877/c
 ID ADQ16877 standard; DNA; 14 BP.

AC ADQ16877;

XX 07-OCT-2004 (first entry)

XX Immunomodulatory polynucleotide, SEQ ID No 167.

XX Immunomodulatory polynucleotide; IMP; palindromic sequence; dinucleotide;
 KW trinucleotide; antimicrobial; anti-allergic; antiasthmatic;
 KW dermatological; antiinflammatory; ophthalmological; immunosuppressive;
 KW antibacterial; vasotropic; antiparasitic; virucide; hepatotropic;
 KW anti-HIV; cytostatic; antiulcer; nephrotropic; IGE-related disorder;
 KW T helper; (TH)2-type immune response; vaccine; prophylactic; immune;
 KW interferon-gamma; interferon-alpha; type I interferon; IFN-alpha;
 KW IFN-omega; IFN-gamma; plasmacytoid dendritic cell; ss.

XX Unidentified.

XX WO2004058179-A2.

XX 15-JUL-2004.

XX 18-DEC-2003; 2003WO-US041001.

XX 23-DEC-2002; 2002US-0436122P.

XX 13-FEB-2003; 2003US-0447885P.

XX 01-MAY-2003; 2003US-0467546P.

XX (DYNA-) DYNNAVX TECHNOLOGIES.

XX Dina D, Fearon KL, Marshall J;

XX WPT; 2004-525782/50.

XX Immunomodulatory polynucleotide useful for the treatment of e.g. atopic
 PT dermatitis comprises palindromic sequence comprising at least eight bases
 PT in length, which contains at least two dinucleotides and at least one
 PT trinucleotide.

XX Example 1; SEQ ID NO 167; 119pp; English.

XX The invention relates to a novel immunomodulatory polynucleotide (IMP)
 CC comprising a palindromic sequence. The palindromic sequence comprises at
 CC least 8 bases in length, which contains at least two dinucleotides (CG),
 CC and at least one trinucleotide (TCG)y at or near the 5' end of the
 CC polynucleotide. The CG dinucleotides are separated by 0 - 5 bases. The 5'
 CC T of the (TCG)y is positioned 0 - 3 bases from the 5' end of the
 CC polynucleotide. The (TCG)y is separated from the 5' end of the
 CC palindromic sequence by 0 - 2 bases. The palindromic sequence includes
 CC all or part of the (TCG)y sequence, where y= 1 or 2. The immunomodulatory
 CC polynucleotides have the following activities: antimicrobial,
 CC anti-allergic, antiasthmatic, dermatological, antiinflammatory,
 CC ophthalmological, immunosuppressive, antibacterial, vasotropic,
 CC antiparasitic, virucide, hepatotropic, anti-HIV, cytostatic, antiulcer,
 CC and nephrotropic. The immunomodulatory polynucleotides can be used for
 CC ameliorating a symptom of an infectious disease and IGE-related disorder.
 CC The IMP's may also be used for the treatment of a disorder associated
 CC with a T helper (TH)2-type immune response (e.g. allergies, allergy-
 CC induced asthma or atopic dermatitis), individuals receiving vaccines such
 CC as therapeutic vaccines (e.g. vaccines comprising an allergy epitope, a
 CC mycobacterial epitope or a tumour associated epitope) or prophylactic
 CC vaccines. The IMP's can also be used for the treatment of e.g. food
 CC allergies, rhinitis, atopic dermatitis, conjunctivitis, urticaria, shock,
 CC Hymenoptera sting allergies and drug allergies and parasitic infections;
 CC viral disease e.g. Hepatitis B, Hepatitis C, influenza, Acquired
 CC immunodeficiency syndrome (AIDS) and Herpes zoster; and cancer;
 CC inflammatory disorder e.g. ulcerative colitis; fibrotic disorder e.g.
 CC idiopathic pulmonary fibrosis, scleroderma, cutaneous radiation-induced
 CC fibrosis, hepatic fibrosis including schistosomiasis-induced hepatic
 CC fibrosis, renal fibrosis. The IMP's may also be used to create a
 CC prophylactic vaccine to increase resistance to infection by bacterial or
 CC viral pathogens. The immunomodulatory polynucleotide modulates an immune
 CC response; or increases interferon-gamma; or interferon-alpha; effectively
 CC stimulates cytokines including type I interferons e.g. IFN-alpha and IFN-
 CC omega and IFN-gamma, production from human cells; effectively stimulates
 CC B cells to proliferate; and activates plasmacytoid dendritic cells to
 CC undergo maturation which can result in retardation of plasmacytoid
 CC dendritic cell apoptosis in culture. This polynucleotide sequence
 CC represents an immunomodulatory polynucleotide of the invention.

XX Sequence 14 BP; 2 A; 4 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 100.0%; Score 10; DB 13; Length 14;

Best Local Similarity 100.0%; Pred. No. 4.7e+03;

Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
 Db 14 CGAACGTTTCG 5
 |||||

RESULT 77

ADQ16819

ID ADQ16819 standard; DNA; 14 BP.

XX ADQ16819;

XX 07-OCT-2004 (first entry)

XX Immunomodulatory polynucleotide, SEQ ID No 98.

XX Immunomodulatory polynucleotide; IMP; palindromic sequence; dinucleotide;
 KW trinucleotide; antimicrobial; anti-allergic; antiasthmatic;
 KW dermatological; antiinflammatory; ophthalmological; immunosuppressive;
 KW antibacterial; vasotropic; antiparasitic; virucide; hepatotropic;
 KW anti-HIV; cytostatic; antiulcer; nephrotropic; IGE-related disorder;
 KW T helper; (TH)2-type immune response; vaccine; prophylactic; immune;
 KW interferon-gamma; interferon-alpha; type I interferon; IFN-alpha;
 KW IFN-omega; IFN-gamma; plasmacytoid dendritic cell; ss.

XX Unidentified.

XX FN WO2004058179-A2.
 XX PD 15-JUL-2004.
 XX PF 18-DEC-2003; 2003WO-US041001.
 XX PR 23-DEC-2002; 2002US-0436122P.
 XX PR 13-FEB-2003; 2003US-0447885P.
 XX PR 01-MAY-2003; 2003US-0467546P.
 XX PA (DYNA-) DYNAVAX TECHNOLOGIES.
 XX PI Dina D, Fearon KL, Marshall J;
 XX DR WPI; 2004-525782/50.
 XX PT Immunomodulatory polynucleotide useful for the treatment of e.g. atopic
 PT dermatitis comprising palindromic sequence comprising at least eight bases
 PT in length, which contains at least two dinucleotides and at least one
 PT trinucleotide.
 XX OS Example 1; SEQ ID NO 98; 119pp; English.
 XX PS The invention relates to a novel immunomodulatory polynucleotide (IMP)
 CC comprising a palindromic sequence. The palindromic sequence comprises at
 CC least 8 bases in length, which contains at least two dinucleotides (CG),
 CC and at least one trinucleotide (TCG)Y at or near the 5' end of the
 CC polynucleotide. The CG dinucleotides are separated by 0 - 5 bases. The 5'
 CC T of the (TCG)Y is positioned 0 - 3 bases from the 5' end of the
 CC polynucleotide. The (TCG)Y is separated from the 5' end of the
 CC palindromic sequence by 0 - 2 bases. The palindromic sequence includes
 CC all or part of the (TCG)Y sequence, where Y= 1 or 2. The immunomodulatory
 CC polynucleotides have the following activities: antimicrobial,
 CC antiallergic, antiasthmatic, dermatological, antiinflammatory,
 CC ophthalmological, immunosuppressive, antibacterial, vasotrophic,
 CC antiparasitic, virucide, hepatotropic, anti-HIV, cytostatic, antitumor,
 CC and nephrotropic. The immunomodulatory polynucleotides can be used for
 CC ameliorating a symptom of an infectious disease and IgE-related disorder.
 CC The IMP's may also be used for the treatment of a disorder associated
 CC with a T helper (TH)2-type immune response (e.g. allergies, allergy-
 CC induced asthma or atopic dermatitis), individuals receiving vaccines such
 CC as therapeutic vaccines (e.g. vaccines comprising an allergy epitope, a
 CC mycobacterial epitope or a tumour associated epitope) or prophylactic
 CC vaccines. The IMP's can also be used for the treatment of e.g. food
 CC allergies, rhinitis, atopic dermatitis, conjunctivitis, urticaria, shock,
 CC Hymenoptera sting allergies and drug allergies and parasitic infections;
 CC viral disease e.g. Hepatitis B, Hepatitis C, Influenza, Acquired
 CC immunodeficiency syndrome (AIDS) and Herpes zoster; and cancer;
 CC idiopathic pulmonary fibrosis, scleroderma, cutaneous radiation-induced
 CC fibrosis, hepatic fibrosis including schistosomiasis-induced hepatic
 CC fibrosis, renal fibrosis. The IMP's may also be used to create a
 CC prophylactic vaccine to increase resistance to infection by bacterial or
 CC viral pathogens. The immunomodulatory polynucleotide modulates an immune
 CC response; or increases interferon-gamma; or interferon-alpha; effectively
 CC stimulates cytokines including type I interferons e.g. IFN-alpha and IFN-
 CC omega and IFN-gamma, production from human cells; effectively stimulates
 CC B cells to proliferate; and activates plasmacytoid dendritic cells to
 CC undergo maturation which can result in retardation of plasmacytoid
 CC dendritic cell apoptosis in culture. This polynucleotide sequence
 CC represents an immunomodulatory polynucleotide of the invention.
 XX SQ Sequence 14 BP; 4 A; 3 C; 3 G; 4 T; 0 U; 0 Other;
 Query Match 100.0%; Score 10; DB 13; Length 14;
 Best Local Similarity 100.0%; Pred. No. 4.7e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 1 CGAAGTTCG 10
 |||||
 Db 3 CGAAGTTCG 12

RESULT 78
 ADQ16819/c
 ID ADQ16819 standard; DNA; 14 BP.
 XX AC ADQ16819;
 XX DT 07-OCT-2004 (first entry)
 XX DE Immunomodulatory polynucleotide, SEQ ID NO 98.
 XX KW Immunomodulatory polynucleotide; IMP; palindromic sequence; dinucleotide;
 KW trinucleotide; antimicrobial; antiallergic; antiasthmatic;
 KW dermatological; antiinflammatory; ophthalmological; immunosuppressive;
 KW antibacterial; vasotrophic; antiparasitic; virucide; hepatotropic;
 KW anti-HIV; cytostatic; antitumor; nephrotropic; IgE-related disorder;
 KW T helper; (TH)2-type immune response; vaccine; prophylactic; immune;
 KW interferon-gamma; interferon-alpha; type I interferon; IFN-alpha;
 KW IFN-omega; IFN-gamma; plasmacytoid dendritic cell; ss.
 XX OS Unidentified.
 XX PN WO2004058179-A2.
 XX PD 15-JUL-2004.
 XX PF 18-DEC-2003; 2003WO-US041001.
 XX PR 23-DEC-2002; 2002US-0436122P.
 XX PR 13-FEB-2003; 2003US-0447885P.
 XX PR 01-MAY-2003; 2003US-0467546P.
 XX PA (DYNA-) DYNAVAX TECHNOLOGIES.
 XX PI Dina D, Fearon KL, Marshall J;
 XX DR WPI; 2004-525782/50.
 XX PT Immunomodulatory polynucleotide useful for the treatment of e.g. atopic
 PT dermatitis comprising palindromic sequence comprising at least eight bases
 PT in length, which contains at least two dinucleotides and at least one
 PT trinucleotide.
 XX PS Example 1; SEQ ID NO 98; 119pp; English.
 XX CC The invention relates to a novel immunomodulatory polynucleotide (IMP)
 CC comprising a palindromic sequence. The palindromic sequence comprises at
 CC least 8 bases in length, which contains at least two dinucleotides (CG),
 CC and at least one trinucleotide (TCG)Y at or near the 5' end of the
 CC polynucleotide. The CG dinucleotides are separated by 0 - 5 bases. The 5'
 CC T of the (TCG)Y is positioned 0 - 3 bases from the 5' end of the
 CC polynucleotide. The (TCG)Y is separated from the 5' end of the
 CC palindromic sequence by 0 - 2 bases. The palindromic sequence includes
 CC all or part of the (TCG)Y sequence, where Y= 1 or 2. The immunomodulatory
 CC polynucleotides have the following activities: antimicrobial,
 CC antiallergic, antiasthmatic, dermatological, antiinflammatory,
 CC ophthalmological, immunosuppressive, antibacterial, vasotrophic,
 CC antiparasitic, virucide, hepatotropic, anti-HIV, cytostatic, antitumor,
 CC and nephrotropic. The immunomodulatory polynucleotides can be used for
 CC ameliorating a symptom of an infectious disease and IgE-related disorder.
 CC The IMP's may also be used for the treatment of a disorder associated
 CC with a T helper (TH)2-type immune response (e.g. allergies, allergy-
 CC induced asthma or atopic dermatitis), individuals receiving vaccines such
 CC as therapeutic vaccines (e.g. vaccines comprising an allergy epitope, a
 CC mycobacterial epitope or a tumour associated epitope) or prophylactic
 CC vaccines. The IMP's can also be used for the treatment of e.g. food
 CC allergies, rhinitis, atopic dermatitis, conjunctivitis, urticaria, shock,
 CC Hymenoptera sting allergies and drug allergies and parasitic infections;
 CC viral disease e.g. Hepatitis B, Hepatitis C, Influenza, Acquired
 CC immunodeficiency syndrome (AIDS) and Herpes zoster; and cancer;
 CC idiopathic pulmonary fibrosis, scleroderma, cutaneous radiation-induced
 CC fibrosis, hepatic fibrosis including schistosomiasis-induced hepatic
 CC fibrosis, renal fibrosis. The IMP's may also be used to create a
 CC prophylactic vaccine to increase resistance to infection by bacterial or
 CC viral pathogens. The immunomodulatory polynucleotide modulates an immune
 CC response; or increases interferon-gamma; or interferon-alpha; effectively
 CC stimulates cytokines including type I interferons e.g. IFN-alpha and IFN-
 CC omega and IFN-gamma, production from human cells; effectively stimulates
 CC B cells to proliferate; and activates plasmacytoid dendritic cells to
 CC undergo maturation which can result in retardation of plasmacytoid
 CC dendritic cell apoptosis in culture. This polynucleotide sequence
 CC represents an immunomodulatory polynucleotide of the invention.

CC fibrosis, renal fibrosis. The IMP's may also be used to create a
 CC prophylactic vaccine to increase resistance to infection by bacterial or
 CC viral pathogens. The immunomodulatory polynucleotide modulates an immune
 CC response; or increases interferon-gamma; or interferon-alpha; effectively
 CC stimulates cytokines including type I interferons e.g. IFN-alpha and IFN-
 CC omega and IFN-gamma, production from human cells; effectively stimulates
 CC B cells to proliferate; and activates plasmacytoid dendritic cells to
 CC undergo maturation which can result in retardation of plasmacytoid
 CC dendritic cell apoptosis in culture. This polynucleotide sequence
 CC represents an immunomodulatory polynucleotide of the invention.

XX Sequence 14 BP; 4 A; 3 C; 3 G; 4 T; 0 U; 0 Other;

Query Match 100.0%; Score 10; DB 13; Length 14;
 Best Local Similarity 100.0%; Pred. No. 4.7e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
 |||||
 Db 12 CGAACGTTTCG 3

RESULT 79

ADQ16822
 ID ADQ16822 standard; DNA; 15 BP.

XX AC ADQ16822;

XX 07-OCT-2004 (first entry)

XX Immunomodulatory polynucleotide, SEQ ID No 101.

KW Immunomodulatory polynucleotide; IMP; palindromic sequence; dinucleotide;
 KW trinucleotide; antimicrobial; anti-allergic; antiasthmatic;
 KW dermatological; antiinflammatory; ophthalmological; immunosuppressive;
 KW antibacterial; vasotrophic; antiparasitic; virucide; hepatotropic;
 KW anti-HIV; cytostatic; antiulcer; nephrotropic; IGE-related disorder;
 KW T helper; (TH)2-type immune response; vaccine; prophylactic; immune;
 KW interferon-gamma; interferon-alpha; type I interferon; IFN-alpha;
 KW IFN-omega; IFN-gamma; plasmacytoid dendritic cell; ss.

XX Unidentified.

XX WO2004058179-A2.

XX 15-JUL-2004.

XX 18-DEC-2003; 2003WO-US041001.

XX 23-DEC-2002; 2002US-0436122P.

XX 13-FEB-2003; 2003US-0447885P.

XX 01-MAY-2003; 2003US-0467546P.

XX (DYNA-) DYNAVAX TECHNOLOGIES.

XX Dina D, Fearon KL, Marshall J;

XX WPI; 2004-525782/50.

XX Immunomodulatory polynucleotide useful for the treatment of e.g. atopic
 PT dermatitis comprises palindromic sequence comprising at least eight bases
 PT in length, which contains at least two dinucleotides and at least one
 PT trinucleotide.

XX Example 1; SEQ ID NO 101; 119pp; English.

XX The invention relates to a novel immunomodulatory polynucleotide (IMP)
 CC comprising a palindromic sequence. The palindromic sequence comprises at
 CC least 8 bases in length, which contains at least two dinucleotides (CG),
 CC and at least one trinucleotide (TCG) at or near the 5' end of the
 CC polynucleotide. The CG dinucleotides are separated by 0 - 5 bases. The 5'
 CC T of the (TCG) is positioned 0 - 3 bases from the 5' end of the
 CC polynucleotide. The (TCG) is separated from the 5' end of the

CC palindromic sequence by 0 - 2 bases. The palindromic sequence includes
 CC all or part of the (TCG) sequence, where Y= 1 or 2. The immunomodulatory
 CC polynucleotides have the following activities: antimicrobial,
 CC anti-allergic, antiasthmatic, dermatological, antiinflammatory,
 CC ophthalmological, immunosuppressive, antibacterial, vasotrophic,
 CC antiparasitic, virucide, hepatotropic, anti-HIV, cytostatic, antiulcer,
 CC and nephrotropic. The immunomodulatory polynucleotides can be used for
 CC ameliorating a symptom of an infectious disease and IGE-related disorder.
 CC The IMP's may also be used for the treatment of a disorder associated
 CC with a T helper (TH)2-type immune response (e.g. allergies, allergy-
 CC induced asthma or atopic dermatitis), individuals receiving vaccines such
 CC as therapeutic vaccines (e.g. vaccines comprising an allergy epitope, a
 CC mycobacterial epitope or a tumour associated epitope) or prophylactic
 CC vaccines. The IMP's can also be used for the treatment of e.g. food
 CC allergies, rhinitis, atopic dermatitis, conjunctivitis, urticaria, shock,
 CC Hymenoptera sting allergies and drug allergies and parasitic infections;
 CC viral disease e.g. Hepatitis B, Hepatitis C, influenza, Acquired
 CC immunodeficiency syndrome (AIDS) and Herpes zoster; and cancer;
 CC inflammatory disorder e.g. ulcerative colitis; fibrotic disorder e.g.
 CC idiopathic pulmonary fibrosis, scleroderma, cutaneous radiation-induced
 CC fibrosis, hepatic fibrosis including schistosomiasis-induced hepatic
 CC fibrosis, renal fibrosis. The IMP's may also be used to create a
 CC prophylactic vaccine to increase resistance to infection by bacterial or
 CC viral pathogens. The immunomodulatory polynucleotide modulates an immune
 CC response; or increases interferon-gamma; or interferon-alpha; effectively
 CC stimulates cytokines including type I interferons e.g. IFN-alpha and IFN-
 CC omega and IFN-gamma, production from human cells; effectively stimulates
 CC B cells to proliferate; and activates plasmacytoid dendritic cells to
 CC undergo maturation which can result in retardation of plasmacytoid
 CC dendritic cell apoptosis in culture. This polynucleotide sequence
 CC represents an immunomodulatory polynucleotide of the invention.

XX Sequence 15 BP; 3 A; 4 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 100.0%; Score 10; DB 13; Length 15;
 Best Local Similarity 100.0%; Pred. No. 4.7e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
 |||||
 Db 5 CGAACGTTTCG 14

RESULT 80

ADQ16822/c

ID ADQ16822 standard; DNA; 15 BP.

XX AC ADQ16822;

XX 07-OCT-2004 (first entry)

XX Immunomodulatory polynucleotide, SEQ ID No 101.

KW Immunomodulatory polynucleotide; IMP; palindromic sequence; dinucleotide;
 KW trinucleotide; antimicrobial; anti-allergic; antiasthmatic;
 KW dermatological; antiinflammatory; ophthalmological; immunosuppressive;
 KW antibacterial; vasotrophic; antiparasitic; virucide; hepatotropic;
 KW anti-HIV; cytostatic; antiulcer; nephrotropic; IGE-related disorder;
 KW T helper; (TH)2-type immune response; vaccine; prophylactic; immune;
 KW interferon-gamma; interferon-alpha; type I interferon; IFN-alpha;
 KW IFN-omega; IFN-gamma; plasmacytoid dendritic cell; ss.

XX Unidentified.

XX WO2004058179-A2.

XX 15-JUL-2004.

XX 18-DEC-2003; 2003WO-US041001.

XX 23-DEC-2002; 2002US-0436122P.

XX 13-FEB-2003; 2003US-0447885P.

XX 01-MAY-2003; 2003US-0467546P.

XX PA (DYNA-) DYNAVAX TECHNOLOGIES.

XX PI Dina D, Fearon KL, Marshall J;

XX DR WPI; 2004-525782/50.

XX PT Immunomodulatory polynucleotide useful for the treatment of e.g. atopic
PT dermatitis comprises palindromic sequence comprising at least eight bases
PT in length, which contains at least two dinucleotides and at least one
PT trinucleotide.

XX PS Example 1; SEQ ID NO 101; 119pp; English.

XX CC The invention relates to a novel immunomodulatory polynucleotide (IMP)
CC comprising a palindromic sequence. The palindromic sequence comprises at
CC least 8 bases in length, which contains at least two dinucleotides (CG),
CC and at least one trinucleotide (TCG) at or near the 5' end of the
CC polynucleotide. The CG dinucleotides are separated by 0 - 5 bases. The 5'
CC T of the (TCG) is positioned 0 - 3 bases from the 5' end of the
CC palindromic sequence. The (TCG) is separated from the 5' end of the
CC all or part of the (TCG) sequence, where Y=1 or 2. The immunomodulatory
CC polynucleotides have the following activities: antimicrobial,
CC antiallergic, antiasthmatic, dermatological, antiinflammatory,
CC ophthalmological, immunosuppressive, antibacterial, vasotropic,
CC antiparasitic, virucide, hepatotropic, anti-HIV, cytostatic, antiulcer,
CC and nephrotropic. The immunomodulatory polynucleotides can be used for
CC ameliorating a symptom of an infectious disease and IgE-related disorder.
CC The IMP's may also be used for the treatment of a disorder associated
CC with a T helper (TH)2-type immune response (e.g. allergies, allergy-
CC induced asthma or atopic dermatitis), individuals receiving vaccines such
CC as therapeutic vaccines (e.g. vaccines comprising an allergy epitope, a
CC mycobacterial epitope or a tumour associated epitope) or prophylactic
CC vaccines. The IMP's can also be used for the treatment of e.g. food
CC allergies, rhinitis, atopic dermatitis, conjunctivitis, urticaria, shock,
CC Hymenoptera sting allergies and drug allergies and parasitic infections;
CC viral disease e.g. Hepatitis B, Hepatitis C, Influenza, Acquired
CC immunodeficiency syndrome (AIDS) and Herpes zoster; and cancer;
CC inflammatory disorder e.g. ulcerative colitis; fibrotic disorder e.g.
CC idiopathic pulmonary fibrosis, scleroderma, cutaneous radiation-induced
CC fibrosis, hepatic fibrosis including schistosomiasis-induced hepatic
CC fibrosis, renal fibrosis. The IMP's may also be used to create a
CC prophylactic vaccine to increase resistance to infection by bacterial or
CC viral pathogens. The immunomodulatory polynucleotide modulates an immune
CC response; or increases interferon-gamma; or interferon-alpha; effectively
CC stimulates cytokines including type I interferons e.g. IFN-alpha and IFN-
CC omega and IFN-gamma, production from human cells; effectively stimulates
CC B cells to proliferate; and activates plasmacytoid dendritic cells to
CC undergo maturation which can result in retardation of plasmacytoid
CC dendritic cell apoptosis in culture. This polynucleotide sequence
CC represents an immunomodulatory polynucleotide of the invention.

XX SQ Sequence 15 BP; 3 A; 4 C; 4 G; 4 T; 0 U; 0 Other;

Query Match 100.0%; Score 10; DB 13; Length 15;
Best Local Similarity 100.0%; Pred. No. 4.7e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
| | | | |
Db 14 CGAACGTTTCG 5

RESULT 81
ABQ75162
ID ABQ75162 standard; DNA; 16 BP.

XX AC ABQ75162;

XX DT 05-NOV-2002 (first entry)

XX DE ISS immunomodulatory oligonucleotide SEQ ID NO:11.

XX

KW Immunostimulatory sequence; ISS: immunomodulatory; immune response;
KW allergy; asthma; infectious disease; interferon-gamma; IFN-gamma;
KW idiopathic pulmonary fibrosis; viral infection; mycobacterial disease;
KW malaria; leishmaniasis; toxoplasmosis; schistosomiasis; clonorchiasis;
KW immunoglobulin E; IgE-related disorder; antiallergic; antiasthmatic;
KW virucide; antibacterial; protozoacide; ss.

XX Synthetic.

XX OS

XX PN WO200252002-A2.

XX PD 04-JUL-2002.

XX PF 27-DEC-2001; 2001WO-US050821.

XX PR 27-DEC-2000; 2000US-0258675P.

XX XX (DYNA-) DYNAVAX TECHNOLOGIES CORP.

XX PI Fearon KL, Dina D;

XX DR WPI; 2002-657426/70.

XX PT Immunomodulatory polynucleotide for modulating an immune response in a
PT subject suffering from disorders associated with Th2-type immune
PT response, e.g. allergy, or infectious disease, comprises an
PT immunostimulatory sequence.

XX PS Example 1; Page 20; 95pp; English.

XX CC The present invention describes an immunomodulatory polynucleotide (I)
CC comprising an immunostimulatory sequence (ISS). Also described: (1) an
CC immunomodulatory composition comprising (I); (2) an immunomodulatory
CC polynucleotide/microcarrier (IMP/MC) complex, comprising (I) linked to a
CC biodegradable MC, where the MC is less than 10 micrometre in size; and
CC (3) a kit comprising (I). (I) has antiallergic, antiasthmatic, virucide,
CC antibacterial and protozoacide activities, and can be used as a modulator
CC of immune response. (I) is useful for modulating an immune response in an
CC individual suffering from disorders associated with a Th2-type immune
CC response, especially an allergy or asthma, or an infectious disease. (I)
CC is also useful for increasing interferon-gamma (IFN-gamma) in an
CC individual having idiopathic pulmonary fibrosis, or IFN-alpha in an
CC individual having a viral infection. (I) is further useful for
CC ameliorating a symptom of an infectious disease caused by a cellular
CC pathogen such as mycobacterial disease, malaria, leishmaniasis,
CC toxoplasmosis, schistosomiasis and clonorchiasis in an individual, or a
CC symptom of an immunoglobulin E (IgE)-related disorder, preferably an
CC allergy-related disorder, in particular asthma in an individual. The
CC present sequence represents an immunomodulatory oligonucleotide from the
CC present invention

XX SQ Sequence 16 BP; 2 A; 4 C; 4 G; 6 T; 0 U; 0 Other;

Query Match 100.0%; Score 10; DB 6; Length 16;
Best Local Similarity 100.0%; Pred. No. 4.7e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
| | | | |
Db 5 CGAACGTTTCG 14

RESULT 82
ABQ75162/c
ID ABQ75162 standard; DNA; 16 BP.

XX AC ABQ75162;

XX DT 05-NOV-2002 (first entry)

XX DE ISS immunomodulatory oligonucleotide SEQ ID NO:11.

KW	Immunostimulatory sequence; ISS: immunomodulatory; immune response;
KW	allergy; asthma; infectious disease; interferon-gamma; IFN-gamma;
KW	idiopathic pulmonary fibrosis; viral infection; mycobacterial disease;
KW	malaria; leishmaniasis; toxoplasmosis; schistosomiasis; clonorchiasis;
KW	immunoglobulin E; IgE-related disorder; anti-allergic; antiasthmatic;
KW	virucide; antibacterial; protozoacide; ss.
XX	
XX	Synthetic.
OS	
XX	
PN	WO200252002-A2.
XX	
XX	
PD	04-JUL-2002.
XX	
XX	
PF	27-DEC-2001; 2001WO-US050821.
XX	
PR	27-DEC-2000; 2000US-0258675P.
XX	
XX	(DYNA-) DYNAVAX TECHNOLOGIES CORP.
PA	
XX	
PI	Fearon KL, Dina D;
XX	
XX	WPI; 2002-657426/70.
DR	
XX	
PT	Immunomodulatory polynucleotide for modulating an immune response in a
PT	subject suffering from disorders associated with Th2-type immune
PT	response, e.g. allergy, or infectious disease, comprises an
PT	immunostimulatory sequence.
PT	

KW	spacer moiety; linear hexaethylene glycol structure; HEG; immune;
KW	Th2-type; allergy; allergy-induced asthma; infectious disease; IFN-gamma;
KW	IFN-alpha; idiopathic pulmonary fibrosis; viral infection; ameliorating;
KW	immunoglobulin E; IgE; allergy; cancer;
KW	stimulating cellular immune system cell; ss.
XX	
XX	Synthetic.
XX	
PN	WO2003000922-A2.
XX	
PD	03-JAN-2003.
XX	
XX	21-JUN-2002; 2002WO-US020025.
XX	
PR	21-JUN-2001; 2001US-0299883P.
PR	23-APR-2002; 2002US-0375253P.
XX	
PA	(DYNA-) DYNAVAX TECHNOLOGIES CORP.
XX	
PI	Fearon KL, Dina D, Tuck SF;
XX	
DR	WPI; 2003-210159/20.
XX	
PT	Novel chimeric immunomodulatory compound having immunomodulatory
PT	activity, useful for modulating an immune response and for treating
PT	cancer, has nucleic acid moieties and non-nucleic acid spacer moieties.
XX	
PS	Disclosure; Page 33; 224pp; English.

SQ Sequence 16 BP; 2 A; 4 C; 4 G; 6 T; 0 U; 0 Other;
 Query Match 100.0%; Score 10; DB 6; Length 16;
 Best Local Similarity 100.0%; Pred. No. 4.7e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
Db 14 CGAACGTTTCG 5

RESULT 83
AD88830
ID ADB88830 standard; DNA; 16 BP.
XX
XX
XX ADB88830;
XX
DT 04-DEC-2003 (first entry)
XX
XX
DE Chimeric immunomodulatory compound DNA sequence, SEQ ID No 33.
XX
XX chimeric immunomodulatory compound; CIC; immunomodulatory activity;
KW

RESULT 84
ADB8830/c
ID ADB8830 standard; DNA; 16 BP.
XX
XX
XX ADB8830;
XX
DT 04-DEC-2003 (first entry)

Query Match	100.0%;	Score 10;	DB 9;	Length 16;
Best Local Similarity	100.0%;	Pred. No. 4.7e+03;		
Matches 10;	Conservative	0;	Mismatches 0;	Indels 0;
Matches 10;	Conservative	0;	Mismatches 0;	Indels 0;

Qy 1 CGAACGTTTCG 10
Db 5 CGAACGTTTCG 14

spacer moiety; linear hexaethylene glycol structure; HEG; immune; Th2-type; allergy; allergy-induced asthma; infectious disease; IFN-gamma; IFN-alpha; idiopathic pulmonary fibrosis; viral infection; ameliorating; immunoglobulin E; IgE; allergy; cancer; stimulating cellular immune system cell; ss.

Synthetic.

WO200300922-A2.

03-JAN-2003.

21-JUN-2002; 2002WO-US020025.

21-JUN-2001; 2001US-0299883P.

23-APR-2002; 2002US-0375253P.

(DYNA-) DYNAVAX TECHNOLOGIES CORP.

Fearon KL, Dina D, Tuck SF;

WPI; 2003-210159/20.

Novel chimeric immunomodulatory compound having immunomodulatory

activity, useful for modulating an immune response and for treating

cancer, has nucleic acid moieties and non-nucleic acid spacer moieties.

Disclosure; Page 33; 224pp; English.

The invention relates to a novel chimeric immunomodulatory compound (CIC) having immunomodulatory activity, comprising two or more nucleic acid moieties and one or more non-nucleic acid spacer moieties, where at least one non-nucleic acid spacer moiety is covalently joined to two nucleic acid moieties, where the spacer is not a polypeptide, and at least one nucleic acid moiety comprises the sequence 5'-CG-3'. The chimeric immunomodulatory compounds more specifically contain the nucleic acid

spacer moieties of linear hexaethylene glycol structure (HEG) subunits. CIC's are useful for modulating an immune response in an individual, where the individual suffers from a disorder associated with a Th2-type immune response which is an allergy or allergy-induced asthma, and an infectious disease. CIC is also useful for increasing IFN-gamma, or IFN-alpha, in an individual, where the individual has idiopathic pulmonary fibrosis, or a viral infection. CIC's are useful for ameliorating a symptom of an infectious disease, or an immunoglobulin E (IgE)-related disorder in an individual, where the IgE-related disorder is allergy, or an allergy-related disorder. CIC's are also useful for treating cancer and can be used for stimulating cellular immune system cells production in an individual. This polynucleotide sequence represents a DNA sequence which is a nucleic acid moiety part of a chimeric immunomodulatory compound of the invention.

Sequence 16 BP; 2 A; 4 C; 4 G; 6 T; 0 U; 0 Other;

Query Match 100.0%; Score 10; DB 9; Length 16;

Best Local Similarity 100.0%; Pred. No. 4.7e+03;

Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 CGAACGTTTCG 10

|||||

14 CGAACGTTTCG 5

RESULT 85

ADK67587

ID ADK67587 standard; DNA; 16 BP.

AC ADK67587;

06-MAY-2004 (first entry)

Immunostimulant oligonucleotide 16TCG, for immunomodulatory composition.

Immunomodulator; immunostimulant; vaccine; ss.

XX OS

Synthetic.

WO2004014322-A2.

19-FEB-2004.

12-AUG-2003; 2003WO-US025415.

12-AUG-2002; 2002US-0402968P.

(DYNA-) DYNAVAX TECHNOLOGIES CORP.

Van Nest G, Tuck S;

WPI; 2004-238627/22.

Immunomodulatory composition useful for modulating immune responses in individuals, comprises immunomodulatory particles or a particulate composition made by mixing cationic condensing agent and an immunomodulatory compound.

Example 4; SEQ ID NO 17; 90pp; English.

The present sequence is that of an immunomodulatory compound (IMC), designated 16TCG, that can be used in novel immunomodulatory compositions of the invention. The IMC may contain modifications of the 3'OH or 5'OH group, the nucleotide base, the sugar component and phosphate group. Novel immunomodulatory compositions of the invention comprise a cationic condensing agent, an IMC comprising the nucleotide sequence 5'-CG-3', and a stabilising agent. The compositions form particles which have increased immunomodulatory activity as compared to IMCs not formulated in the compositions of the invention. The immunomodulatory compositions can be used for immunomodulation of an individual, e.g. when the individual suffers from a disorder associated with a Th2-type immune response (e.g. allergies or allergy-induced asthma), is receiving vaccines such as therapeutic vaccines (e.g. vaccines comprising an allergy epitope, a mycobacterial epitope or a tumour associated epitope) or prophylactic vaccines, suffers from cancer, suffers from an infectious disease or is at risk of exposure to an infectious agent. In an example from the invention, IMC 16TCG was used to examine immunomodulation of human cells with particulate compositions incorporating a panel of IMC oligonucleotides.

Sequence 16 BP; 2 A; 4 C; 4 G; 6 T; 0 U; 0 Other;

Query Match 100.0%; Score 10; DB 12; Length 16;

Best Local Similarity 100.0%; Pred. No. 4.7e+03;

Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 CGAACGTTTCG 10

|||||

5 CGAACGTTTCG 14

RESULT 86

ADK67587/c

ID ADK67587 standard; DNA; 16 BP.

AC ADK67587;

06-MAY-2004 (first entry)

Immunostimulant oligonucleotide 16TCG, for immunomodulatory composition.

Immunomodulator; immunostimulant; vaccine; ss.

Synthetic.

WO2004014322-A2.

19-FEB-2004.

PF 12-AUG-2003; 2003WO-US025415.
XX
PR
XX 12-AUG-2002; 2002US-0402968P.
XX
PA (DYNA-) DYNAVAX TECHNOLOGIES CORP.
XX
XX Van Nest G, Tuck S;
XX WPI; 2004-238627/22.
DR
XX
XX Immunomodulatory composition useful for modulating immune responses in
PT individuals, comprises immunomodulatory particles or a particulate
PT composition made by mixing cationic condensing agent and an
PT immunomodulatory compound.
XX
XX Example 4; SEQ ID NO 17; 90pp; English.
PS
XX
XX The present sequence is that of an immunomodulatory compound (IMC),
CC designated 16TCG, that can be used in novel immunomodulatory compositions
CC of the invention. The IMC may contain modifications of the 3'OH or 5'OH
CC group, the nucleotide base, the sugar component and phosphate group.
CC Novel immunomodulatory compositions of the invention comprise a cationic
CC condensing agent, an IMC comprising the nucleotide sequence 5'-CG-3', and
CC a stabilising agent. The compositions form particles which have increased
CC immunomodulatory activity as compared to IMCs not formulated in the
CC compositions of the invention. The immunomodulatory compositions can be
CC used for immunomodulation of an individual, e.g. when the individual
CC suffers from a disorder associated with a Th2-type immune response (e.g.
CC allergies or allergy-induced asthma), is receiving vaccines such as
CC therapeutic vaccines (e.g. vaccines comprising an allergy epitope, a
CC mycobacterial epitope or a tumour associated epitope) or prophylactic
CC vaccines, suffers from cancer, suffers from an infectious disease or is
CC at risk of exposure to an infectious agent. In an example from the
CC invention, IMC 16TCG was used to examine immunomodulation of human cells
CC with particulate compositions incorporating a panel of IMC
CC oligonucleotides.
XX
XX Sequence 16 BP; 2 A; 4 C; 4 G; 6 T; 0 U; 0 Other;
SQ
Query Match 100.0%; Score 10; DB 12; Length 16;
Best Local Similarity 100.0%; Pred. No. 4.7e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 CGAACGTTTCG 10
Db 14 CGAACGTTTCG 5
RESULT 87
ADQ95291
ID ADQ95291 standard; DNA; 16 BP.
XX
XX ADQ95291;
AC
XX 07-OCT-2004 (first entry)
DT
XX
XX Branched immunomodulatory compound related oligonucleotide, SEQ ID 33.
DE
XX
XX Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
KW Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Anticancer;
KW Gastrointestinal; Nephrotropic; branched immunomodulatory compound;
KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
IFN-alpha; ss.
XX
XX Synthetic.
OS
XX
XX W02004058159-A2.
PN
XX
XX 15-JUL-2004.
PD
XX
XX 17-DEC-2003; 2003WO-US040417.
PF

XX 23-DEC-2002; 2002US-0436406P.
PR
XX (DYNA-) DYNAVAX TECHNOLOGIES CORP.
PA
XX Fearon XL;
PI
XX WPI; 2004-561515/54.
DR
XX
XX New branched immunomodulatory compound comprising at least three nucleic
PT acid moieties and at least one branch-point nucleoside, useful for
PT modulating an immune response in individual suffering e.g. allergy.
XX
XX Disclosure; SEQ ID NO 33; 183pp; English.
PS
XX
XX The present invention relates to novel branched immunomodulatory
CC compounds (BIC) comprising at least three nucleic acid moieties, at least
CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
CC e.g. the ability to stimulate interferon (IFN)-gamma production from
CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
CC alpha production from human peripheral blood mononuclear cells and the
CC ability to stimulate B cell proliferation. The BIC compounds are useful
CC for modulating an immune response in an individual suffering from a
CC disorder associated with a T helper (Th)2-type immune response e.g.
CC allergy, allergy-induced asthma or an infectious disease; for increasing
CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
CC are also useful for immunomodulation of cells and individuals; in the
CC fields of biomedicine and immunology; for the manufacture of a medicament
CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
CC ameliorating an IGE-related disorder in an individual. The disorders
CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
CC cancer; infectious disease resistant to humoral immune responses (e.g.
CC diseases caused by mycobacterial infections and intracellular pathogens,
CC cellular pathogens e.g. bacteria or protozoans or by subcellular
CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
CC leprosy or M. Marinum or M. ulcerans infections; herpes viruses; diseases
CC caused by intracellular parasites such as malaria; leishmaniasis,
CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
CC the BIC compounds of the invention.
XX
XX Sequence 16 BP; 2 A; 4 C; 4 G; 6 T; 0 U; 0 Other;
SQ
Query Match 100.0%; Score 10; DB 12; Length 16;
Best Local Similarity 100.0%; Pred. No. 4.7e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 CGAACGTTTCG 10
Db 5 CGAACGTTTCG 14
RESULT 88
ADQ95291/c
ID ADQ95291 standard; DNA; 16 BP.
XX
XX ADQ95291;
AC
XX 07-OCT-2004 (first entry)
DT
XX
XX Branched immunomodulatory compound related oligonucleotide, SEQ ID 33.
DE
XX
XX Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
KW Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Anticancer;
KW Gastrointestinal; Nephrotropic; branched immunomodulatory compound;
KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
IFN-alpha; ss.
XX
XX Synthetic.
OS
XX
XX W02004058159-A2.
PN
XX
XX 15-JUL-2004.
PD
XX
XX 17-DEC-2003; 2003WO-US040417.
PF

KW IFN-alpha; ss.
 XX Synthetic.
 XX WO2004058159-A2.
 PN 15-JUL-2004.
 XX 17-DEC-2003; 2003WO-US040417.
 XX 23-DEC-2002; 2002US-0436406P.
 PR (DYNA-) DYNAXVAX TECHNOLOGIES CORP.
 XX Fearon KL;
 PI WPI; 2004-561515/54.
 DR New branched immunomodulatory compound comprising at least three nucleic
 PT acid moieties and at least one branch-point nucleoside, useful for
 PT modulating an immune response in individual suffering e.g. allergy.
 XX Disclosure; SEQ ID NO 33; 183pp; English.
 PS
 XX The present invention relates to novel branched immunomodulatory
 CC compounds (BIC) comprising at least three nucleic acid moieties, at least
 CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
 CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
 CC e.g. the ability to stimulate interferon (IFN)-gamma production from
 CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
 CC alpha production from human peripheral blood mononuclear cells and the
 CC ability to stimulate B cell proliferation. The BIC compounds are useful
 CC for modulating an immune response in an individual suffering from a
 CC disorder associated with a T helper (Th)2-type immune response e.g.
 CC allergy, allergy-induced asthma or an infectious disease; for increasing
 CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
 CC are also useful for immunomodulation of cells and individuals; in the
 CC fields of biomedicine and immunology; for the manufacture of a medicament
 CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
 CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
 CC ameliorating an IGE-related disorder in an individual. The disorders
 CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
 CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
 CC cancer; infectious disease resistant to humoral immune responses (e.g.
 CC diseases caused by mycobacterial infections and intracellular pathogens,
 CC cellular pathogens e.g. bacteria or protozoans or by subcellular
 CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
 CC leprosy or M. marinum or M. ulcerans infections; herpes viruses; diseases
 CC caused by intracellular parasites such as malaria; leishmaniasis,
 CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
 CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
 CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
 CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.
 XX
 SQ Sequence 16 BP; 2 A; 4 C; 4 G; 6 T; 0 U; 0 Other;
 Query Match 100.0%; Score 10; DB 12; Length 16;
 Best Local Similarity 100.0%; Pred. No. 4.7e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 CGAACGTTTCG 10
 Db 14 CGAACGTTTCG 5
 RESULT 89
 ID ADQ16821
 AC ADQ16821 standard; DNA; 16 BP.
 XX ADQ16821;
 XX 07-OCT-2004 (first entry)

XX Immunomodulatory polynucleotide, SEQ ID NO 100.
 DE
 XX
 KW Immunomodulatory polynucleotide; IMP; palindromic sequence; dinucleotide;
 KW trinucleotide; antimicrobial; anti-allergic; antiasthmatic;
 KW dermatological; anti-inflammatory; ophthalmological; immunosuppressive;
 KW antibacterial; vasotropic; antiparasitic; virucide; hepatotropic;
 KW anti-HIV; cytostatic; antiulcer; nephrotropic; IGE-related disorder;
 KW T helper; (Th)2-type immune response; vaccine; prophylactic; immune;
 KW interferon-gamma; interferon-alpha; type I interferon; IFN-alpha;
 KW IFN-omega; IFN-gamma; plasmacytoid dendritic cell; ss.
 XX
 OS Unidentified.
 XX
 XX WO2004058179-A2.
 PN
 XX
 XX 15-JUL-2004.
 PD
 XX 18-DEC-2003; 2003WO-US041001.
 XX 23-DEC-2002; 2002US-0436122P.
 XX 13-FEB-2003; 2003US-0447885P.
 PR 01-MAY-2003; 2003US-0467546P.
 PR
 XX (DYNA-) DYNAXVAX TECHNOLOGIES.
 PA
 XX Dina D, Fearon KL, Marshall J;
 PI WPI; 2004-525782/50.
 XX
 XX Immunomodulatory polynucleotide useful for the treatment of e.g. atopic
 PT dermatitis comprising palindromic sequence comprising at least eight bases
 PT in length, which contains at least two dinucleotides and at least one
 PT trinucleotide.
 XX
 XX Example 1; SEQ ID NO 100; 119pp; English.
 PS
 XX The invention relates to a novel immunomodulatory polynucleotide (IMP)
 CC comprising a palindromic sequence. The palindromic sequence comprises at
 CC least 8 bases in length, which contains at least two dinucleotides (CG),
 CC and at least one trinucleotide (TCG) at or near the 5' end of the
 CC polynucleotide. The CG dinucleotides are separated by 0 - 5 bases. The 5'
 CC T of the (TCG) is positioned 0 - 3 bases from the 5' end of the
 CC polynucleotide. The (TCG) is separated from the 5' end of the
 CC palindromic sequence by 0 - 2 bases. The palindromic sequence includes
 CC all or part of the (TCG) sequence, where y=1 or 2. The immunomodulatory
 CC polynucleotides have the following activities: antimicrobial,
 CC anti-allergic, antiasthmatic, dermatological, anti-inflammatory,
 CC ophthalmological, immunosuppressive, antibacterial, vasotropic,
 CC antiparasitic, virucide, hepatotropic, anti-HIV, cytostatic, antiulcer,
 CC and nephrotropic. The immunomodulatory polynucleotides can be used for
 CC ameliorating a symptom of an infectious disease and IGE-related disorder.
 CC The IMP's may also be used for the treatment of a disorder associated
 CC with a T helper (Th)2-type immune response (e.g. allergies, allergy-
 CC induced asthma or atopic dermatitis), individuals receiving vaccines such
 CC as therapeutic vaccines (e.g. vaccines comprising an allergy epitope, a
 CC mycobacterial epitope or a tumour associated epitope) or prophylactic
 CC vaccines. The IMP's can also be used for the treatment of e.g. food
 CC allergies, rhinitis, atopic dermatitis, conjunctivitis, urticaria, shock,
 CC Hymenoptera sting allergies and drug allergies and parasitic infections;
 CC viral disease e.g. Hepatitis B, Hepatitis C, influenza, Acquired
 CC immunodeficiency syndrome (AIDS) and Herpes zoster; and cancer;
 CC inflammatory disorder e.g. ulcerative colitis; fibrotic disorder e.g.
 CC idiopathic pulmonary fibrosis, scleroderma, cutaneous radiation-induced
 CC fibrosis, hepatic fibrosis including schistosomiasis-induced hepatic
 CC fibrosis, renal fibrosis. The IMP's may also be used to create a
 CC prophylactic vaccine to increase resistance to infection by bacterial or
 CC viral pathogens. The immunomodulatory polynucleotide modulates an immune
 CC response; or increases interferon-gamma; or interferon-alpha; effectively
 CC stimulates cytokines including type I interferons e.g. IFN-alpha and IFN-
 CC omega and IFN-gamma, production from human cells; effectively stimulates
 CC B cells to proliferate; and activates plasmacytoid dendritic cells to
 CC undergo maturation which can result in retardation of plasmacytoid

CC dendritic cell apoptosis in culture. This polynucleotide sequence
 CC represents an immunomodulatory polynucleotide of the invention.

XX Sequence 16 BP; 3 A; 4 C; 5 G; 4 T; 0 U; 0 Other;
 SQ Query Match 100.0%; Score 10; DB 13; Length 16;
 Best Local Similarity 100.0%; Pred. No. 4.7e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
 |||||
 Db 5 CGAACGTTTCG 14

RESULT 90
 ADQ16821/c
 ID ADQ16821 standard; DNA; 16 BP.
 XX
 AC ADQ16821;
 XX
 DT 07-OCT-2004 (first entry)
 XX
 DE Immunomodulatory polynucleotide, SEQ ID No 100.

XX Immunomodulatory polynucleotide; IMP; palindromic sequence; dinucleotide;
 KW trinucleotide; antimicrobial; antiallergic; antiasthmatic;
 KW dermatological; antiinflammatory; ophthalmological; immunosuppressive;
 KW antibacterial; vasotropic; antiparasitic; virucide; hepatotropic;
 KW anti-HIV; cytostatic; antiulcer; nephrotropic; IGE-related disorder;
 KW T helper; (TH)2-type immune response; vaccine; prophylactic; immune;
 KW interferon-gamma; interferon-alpha; type I interferon; IFN-alpha;
 KW IFN-omega; IFN-gamma; plasmacytoid dendritic cell; ss.

XX Unidentified.

XX WO2004058179-A2.

XX 15-JUL-2004.

XX 18-DEC-2003; 2003WO-US041001.

XX 23-DEC-2002; 2002US-0436122P.

XX 13-FEB-2003; 2003US-0447885P.

XX 01-MAY-2003; 2003US-0467546P.

XX (DYNA-) DYNAVAX TECHNOLOGIES.

XX Dina D, Fearon KL, Marshall J;

XX WPI; 2004-525782/50.

XX Immunomodulatory polynucleotide useful for the treatment of e.g. atopic
 PT dermatitis comprising palindromic sequence comprising at least eight bases
 PT in length, which contains at least two dinucleotides and at least one
 PT trinucleotide.

XX Example 1; SEQ ID NO 100; 119pp; English.

XX The invention relates to a novel immunomodulatory polynucleotide (IMP)
 CC comprising a palindromic sequence. The palindromic sequence comprises at
 CC least 8 bases in length, which contains at least two dinucleotides (CG),
 CC and at least one trinucleotide (TCG) at or near the 5' end of the
 CC polynucleotide. The CG dinucleotides are separated by 0 - 5 bases. The 5'
 CC T of the (TCG) is positioned 0 - 3 bases from the 5' end of the
 CC polynucleotide. The (TCG) is separated from the 5' end of the
 CC palindromic sequence by 0 - 2 bases. The palindromic sequence includes
 CC all or part of the (TCG) sequence, where y=1 or 2. The immunomodulatory
 CC polynucleotides have the following activities: antimicrobial,
 CC antiallergic, antiasthmatic, dermatological, antiinflammatory,
 CC ophthalmological, immunosuppressive, antibacterial, vasotropic,
 CC antiparasitic, virucide, hepatotropic, anti-HIV, cytostatic, antiulcer,
 CC and nephrotropic. The immunomodulatory polynucleotides can be used for
 CC ameliorating a symptom of an infectious disease and IGE-related disorder.

CC The IMP's may also be used for the treatment of a disorder associated
 CC with a T helper (TH)2-type immune response (e.g. allergies, allergy-
 CC induced asthma or atopic dermatitis), individuals receiving vaccines such
 CC as therapeutic vaccines (e.g. vaccines comprising an allergy epitope, a
 CC mycobacterial epitope or a tumour associated epitope) or prophylactic
 CC vaccines. The IMP's can also be used for the treatment of e.g. food
 CC allergies, rhinitis, atopic dermatitis, conjunctivitis, urticaria, shock,
 CC Hymenoptera sting allergies and drug allergies and parasitic infections;
 CC viral disease e.g. Hepatitis B, Hepatitis C, influenza, Acquired
 CC immunodeficiency syndrome (AIDS) and Herpes zoster; and cancer;
 CC inflammatory disorder e.g. ulcerative colitis; fibrotic disorder e.g.
 CC idiopathic pulmonary fibrosis, scleroderma, cutaneous radiation-induced
 CC fibrosis, hepatic fibrosis including schistosomiasis-induced hepatic
 CC fibrosis, renal fibrosis. The IMP's may also be used to create a
 CC prophylactic vaccine to increase resistance to infection by bacterial or
 CC viral pathogens. The immunomodulatory polynucleotide modulates an immune
 CC response; or increases interferon-gamma; or interferon-alpha; effectively
 CC stimulates cytokines including type I interferons e.g. IFN-alpha and IFN-
 CC omega and IFN-gamma, production from human cells; effectively stimulates
 CC B cells to proliferate; and activates plasmacytoid dendritic cells to
 CC undergo maturation which can result in retardation of plasmacytoid
 CC dendritic cell apoptosis in culture. This polynucleotide sequence
 CC represents an immunomodulatory polynucleotide of the invention.

XX Sequence 16 BP; 3 A; 4 C; 5 G; 4 T; 0 U; 0 Other;

Query Match 100.0%; Score 10; DB 13; Length 16;

Best Local Similarity 100.0%; Pred. No. 4.7e+03;

Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10

|||||

Db 14 CGAACGTTTCG 5

RESULT 91

ADQ16733

ID ADQ16733 standard; DNA; 16 BP.

XX ADQ16733;

XX 07-OCT-2004 (first entry)

XX Immunomodulatory polynucleotide, SEQ ID No 12.

XX Immunomodulatory polynucleotide; IMP; palindromic sequence; dinucleotide;
 KW trinucleotide; antimicrobial; antiallergic; antiasthmatic;
 KW dermatological; antiinflammatory; ophthalmological; immunosuppressive;
 KW antibacterial; vasotropic; antiparasitic; virucide; hepatotropic;
 KW anti-HIV; cytostatic; antiulcer; nephrotropic; IGE-related disorder;
 KW T helper; (TH)2-type immune response; vaccine; prophylactic; immune;
 KW interferon-gamma; interferon-alpha; type I interferon; IFN-alpha;
 KW IFN-omega; IFN-gamma; plasmacytoid dendritic cell; ss.

XX Unidentified.

XX WO2004058179-A2.

XX 15-JUL-2004.

XX 18-DEC-2003; 2003WO-US041001.

XX 23-DEC-2002; 2002US-0436122P.

XX 13-FEB-2003; 2003US-0447885P.

XX 01-MAY-2003; 2003US-0467546P.

XX (DYNA-) DYNAVAX TECHNOLOGIES.

XX Dina D, Fearon KL, Marshall J;

XX WPI; 2004-525782/50.

XX Immunomodulatory polynucleotide useful for the treatment of e.g. atopic

PT dermatitis comprises palindromic sequence comprising at least eight bases
 PT in length, which contains at least two dinucleotides and at least one
 PT trinucleotide.

PS Example 1; SEQ ID NO 12; 119pp; English.

XX The invention relates to a novel immunomodulatory polynucleotide (IMP)
 CC comprising a palindromic sequence. The palindromic sequence comprises at
 CC least 8 bases in length, which contains at least two dinucleotides (CG),
 CC and at least one trinucleotide (TCG) at or near the 5' end of the
 CC polynucleotide. The CG dinucleotides are separated by 0 - 5 bases. The 5'
 CC T of the (TCG) is positioned 0 - 3 bases from the 5' end of the
 CC polynucleotide. The (TCG) is separated from the 5' end of the
 CC palindromic sequence by 0 - 2 bases. The palindromic sequence includes
 CC all or part of the (TCG) sequence, where y=1 or 2. The immunomodulatory
 CC polynucleotides have the following activities: antimicrobial,
 CC anti-allergic, antiasthmatic, dermatological, anti-inflamatory,
 CC ophthalmological, immunosuppressive, antibacterial, vasotropic,
 CC antiparasitic, virucide, hepatotropic, anti-HIV, cytostatic, antiulcer,
 CC and nephrotropic. The immunomodulatory polynucleotides can be used for
 CC ameliorating a symptom of an infectious disease and IGE-related disorder.
 CC The IMP's may also be used for the treatment of a disorder associated
 CC with a T helper (TH)2-type immune response (e.g. allergies, allergy-
 CC induced asthma or atopic dermatitis), individuals receiving vaccines such
 CC as therapeutic vaccines (e.g. vaccines comprising an allergy epitope, a
 CC mycobacterial epitope or a tumour associated epitope) or prophylactic
 CC vaccines. The IMP's can also be used for the treatment of e.g. food
 CC allergies, rhinitis, atopic dermatitis, conjunctivitis, urticaria, shock,
 CC Hymenoptera sting allergies and drug allergies and parasitic infections;
 CC viral disease e.g. Hepatitis B, Hepatitis C, influenza, Acquired
 CC immunodeficiency syndrome (AIDS) and Herpes zoster; and cancer;
 CC inflammatory disorder e.g. ulcerative colitis; fibrotic disorder e.g.
 CC idiopathic pulmonary fibrosis, scleroderma, cutaneous radiation-induced
 CC fibrosis, hepatic fibrosis including schistosomiasis-induced hepatic
 CC fibrosis, renal fibrosis. The IMP's may also be used to create a
 CC prophylactic vaccine to increase resistance to infection by bacterial or
 CC viral pathogens. The immunomodulatory polynucleotide modulates an immune
 CC response; or increases interferon-gamma; or interferon-alpha; effectively
 CC stimulates cytokines including type I interferons e.g. IFN-alpha and IFN-
 CC omega and IFN-gamma, production from human cells; effectively stimulates
 CC B cells to proliferate; and activates plasmacytoid dendritic cells to
 CC undergo maturation which can result in retardation of plasmacytoid
 CC dendritic cell apoptosis in culture. This polynucleotide sequence
 CC represents an immunomodulatory polynucleotide of the invention.

XX Sequence 16 BP; 2 A; 4 C; 4 G; 6 T; 0 U; 0 Other;

Query Match 100.0%; Score 10; DB 13; Length 16;
 Best Local Similarity 100.0%; Pred. No. 4.7e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10

Db 5 CGAACGTTTCG 14

RESULT 92

ADQ16733/c

ID ADQ16733 standard; DNA; 16 BP.

XX ADQ16733;

AC ADQ16733;

XX 07-OCT-2004 (first entry)

XX Immunomodulatory polynucleotide, SEQ ID NO 12.

KW Immunomodulatory polynucleotide; IMP; palindromic sequence; dinucleotide;
 KW trinucleotide; antimicrobial; anti-allergic; antiasthmatic;
 KW dermatological; anti-inflamatory; ophthalmological; immunosuppressive;
 KW antibacterial; vasotropic; antiparasitic; virucide; hepatotropic;
 KW anti-HIV; cytostatic; antiulcer; nephrotropic; IGE-related disorder;
 KW T helper; (TH)2-type immune response; vaccine; prophylactic; immune;
 KW interferon-gamma; interferon-alpha; type I interferon; IFN-alpha;

IFN-omega; IFN-gamma; plasmacytoid dendritic cell; ss.

Unidentified.

WO2004058179-A2.

15-JUL-2004.

18-DEC-2003; 2003WO-US041001.

23-DEC-2002; 2002US-0436122P.

13-FEB-2003; 2003US-044785P.

01-MAY-2003; 2003US-0467546P.

(DYNA-) DYNAVAX TECHNOLOGIES.

Dina D, Fearon KL, Marshall J;

WPI; 2004-525782/50.

Immunomodulatory polynucleotide useful for the treatment of e.g. atopic
 dermatitis comprises palindromic sequence comprising at least eight bases
 in length, which contains at least two dinucleotides and at least one
 trinucleotide.

Example 1; SEQ ID NO 12; 119pp; English.

The invention relates to a novel immunomodulatory polynucleotide (IMP)
 comprising a palindromic sequence. The palindromic sequence comprises at
 least 8 bases in length, which contains at least two dinucleotides (CG),
 and at least one trinucleotide (TCG) at or near the 5' end of the
 polynucleotide. The CG dinucleotides are separated by 0 - 5 bases. The 5'
 T of the (TCG) is positioned 0 - 3 bases from the 5' end of the
 polynucleotide. The (TCG) is separated from the 5' end of the
 palindromic sequence by 0 - 2 bases. The palindromic sequence includes
 all or part of the (TCG) sequence, where y=1 or 2. The immunomodulatory
 polynucleotides have the following activities: antimicrobial,
 anti-allergic, antiasthmatic, dermatological, anti-inflamatory,
 ophthalmological, immunosuppressive, antibacterial, vasotropic,
 antiparasitic, virucide, hepatotropic, anti-HIV, cytostatic, antiulcer,
 and nephrotropic. The immunomodulatory polynucleotides can be used for
 ameliorating a symptom of an infectious disease and IGE-related disorder.
 The IMP's may also be used for the treatment of a disorder associated
 with a T helper (TH)2-type immune response (e.g. allergies, allergy-
 induced asthma or atopic dermatitis), individuals receiving vaccines such
 as therapeutic vaccines (e.g. vaccines comprising an allergy epitope, a
 mycobacterial epitope or a tumour associated epitope) or prophylactic
 vaccines. The IMP's can also be used for the treatment of e.g. food
 allergies, rhinitis, atopic dermatitis, conjunctivitis, urticaria, shock,
 Hymenoptera sting allergies and drug allergies and parasitic infections;
 viral disease e.g. Hepatitis B, Hepatitis C, influenza, Acquired
 immunodeficiency syndrome (AIDS) and Herpes zoster; and cancer;
 inflammatory disorder e.g. ulcerative colitis; fibrotic disorder e.g.
 idiopathic pulmonary fibrosis, scleroderma, cutaneous radiation-induced
 fibrosis, hepatic fibrosis including schistosomiasis-induced hepatic
 fibrosis, renal fibrosis. The IMP's may also be used to create a
 prophylactic vaccine to increase resistance to infection by bacterial or
 viral pathogens. The immunomodulatory polynucleotide modulates an immune
 response; or increases interferon-gamma; or interferon-alpha; effectively
 stimulates cytokines including type I interferons e.g. IFN-alpha and IFN-
 omega and IFN-gamma, production from human cells; effectively stimulates
 B cells to proliferate; and activates plasmacytoid dendritic cells to
 undergo maturation which can result in retardation of plasmacytoid
 dendritic cell apoptosis in culture. This polynucleotide sequence
 represents an immunomodulatory polynucleotide of the invention.

Sequence 16 BP; 2 A; 4 C; 4 G; 6 T; 0 U; 0 Other;

Query Match 100.0%; Score 10; DB 13; Length 16;

Best Local Similarity 100.0%; Pred. No. 4.7e+03;

Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10

Db 14 CGAACGTTTCG 5
 RESULT 93
 ADQ16775
 ID ADQ16775 standard; DNA; 17 BP.
 XX
 AC ADQ16775;
 XX
 DT 07-OCT-2004 (first entry)
 XX
 DE Immunomodulatory polynucleotide, SEQ ID No 54.
 XX
 KW Immunomodulatory polynucleotide; IMP; palindromic sequence; dinucleotide;
 KW trinucleotide; antimicrobial; anti-allergic; antiasthmatic;
 KW dermatological; anti-inflammatory; ophthalmological; immunosuppressive;
 KW antibacterial; vasotropic; antiparasitic; virucide; hepatotropic;
 KW anti-HIV; cytostatic; antiulcer; nephrotropic; IgE-related disorder;
 KW T helper; (TH)2-type immune response; vaccine; prophylactic; immune;
 KW interferon-gamma; interferon-alpha; type I interferon; IFN-alpha;
 KW IFN-omega; IFN-gamma; plasmacytoid dendritic cell; ss.
 XX
 OS Unidentified.
 XX
 XX WO2004058179-A2.
 XX
 XX 15-JUL-2004.
 XX
 XX 18-DEC-2003; 2003WO-US041001.
 XX
 XX 23-DEC-2002; 2002US-0436122P.
 XX
 XX 13-FEB-2003; 2003US-0447885P.
 XX
 XX 01-MAY-2003; 2003US-0467546P.
 XX
 XX (DYNA-) DYNAVAX TECHNOLOGIES.
 XX
 XX Dina D, Fearon KL, Marshall J;
 XX WPI; 2004-525782/50.
 XX
 XX Immunomodulatory polynucleotide useful for the treatment of e.g. atopic
 PT dermatitis comprising palindromic sequence comprising at least eight bases
 PT in length, which contains at least two dinucleotides and at least one
 PT trinucleotide.
 XX
 XX Example 1; SEQ ID NO 54; 119pp; English.
 XX
 CC The invention relates to a novel immunomodulatory polynucleotide (IMP)
 CC comprising a palindromic sequence. The palindromic sequence comprises at
 CC least 8 bases in length, which contains at least two dinucleotides (CG),
 CC and at least one trinucleotide (TCG) at or near the 5' end of the
 CC polynucleotide. The CG dinucleotides are separated by 0 - 5 bases. The 5'
 CC T of the (TCG) is positioned 0 - 3 bases from the 5' end of the
 CC polynucleotide. The (TCG) is separated from the 5' end of the
 CC palindromic sequence by 0 - 2 bases. The palindromic sequence includes
 CC all or part of the (TCG) sequence, where y= 1 or 2. The immunomodulatory
 CC polynucleotides have the following activities: antimicrobial,
 CC anti-allergic, antiasthmatic, dermatological, anti-inflammatory,
 CC ophthalmological, immunosuppressive, antibacterial, vasotropic,
 CC antiparasitic, virucide, hepatotropic, anti-HIV, cytostatic, antiulcer,
 CC and nephrotropic. The immunomodulatory polynucleotides can be used for
 CC ameliorating a symptom of an infectious disease and IgE-related disorder.
 CC The IMP's may also be used for the treatment of a disorder associated
 CC with a T helper (TH)2-type immune response (e.g. allergies, allergy-
 CC induced asthma or atopic dermatitis), individuals receiving vaccines such
 CC as therapeutic vaccines (e.g. vaccines comprising an allergy epitope, a
 CC mycobacterial epitope or a tumour associated epitope) or prophylactic
 CC vaccines. The IMP's can also be used for the treatment of e.g. food
 CC allergies, rhinitis, atopic dermatitis, conjunctivitis, urticaria, shock,
 CC Hymenoptera sting allergies and drug allergies and parasitic infections;
 CC viral disease e.g. Hepatitis B, Hepatitis C, Influenza, Acquired
 CC immunodeficiency syndrome (AIDS) and Herpes zoster; and cancer;

CC inflammatory disorder e.g. ulcerative colitis; fibrotic disorder e.g.
 CC idiopathic pulmonary fibrosis, scleroderma, cutaneous radiation-induced
 CC fibrosis, hepatic fibrosis including schistosomiasis-induced hepatic
 CC fibrosis, renal fibrosis. The IMP's may also be used to create a
 CC prophylactic vaccine to increase resistance to infection by bacterial or
 CC viral pathogens. The immunomodulatory polynucleotide modulates an immune
 CC response; or increases interferon-gamma; or interferon-alpha; effectively
 CC stimulates cytokines including type I interferons e.g. IFN-alpha and IFN-
 CC omega and IFN-gamma, production from human cells; effectively stimulates
 CC B cells to proliferate; and activates plasmacytoid dendritic cells to
 CC undergo maturation which can result in retardation of plasmacytoid
 CC dendritic cell apoptosis in culture. This polynucleotide sequence
 CC represents an immunomodulatory polynucleotide of the invention.
 XX
 SQ Sequence 17 BP; 4 A; 4 C; 4 G; 5 T; 0 U; 0 Other;
 Query Match 100.0%; Score 10; DB 13; Length 17;
 Best Local Similarity 100.0%; Pred. No. 4.7e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 1 CGAACGTTTCG 10
 Db 6 CGAACGTTTCG 15
 RESULT 94
 ADQ16775/c
 ID ADQ16775 standard; DNA; 17 BP.
 XX
 AC ADQ16775;
 XX
 XX 07-OCT-2004 (first entry)
 XX
 XX DE Immunomodulatory polynucleotide, SEQ ID No 54.
 XX
 KW Immunomodulatory polynucleotide; IMP; palindromic sequence; dinucleotide;
 KW trinucleotide; antimicrobial; anti-allergic; antiasthmatic;
 KW dermatological; anti-inflammatory; ophthalmological; immunosuppressive;
 KW antibacterial; vasotropic; antiparasitic; virucide; hepatotropic;
 KW anti-HIV; cytostatic; antiulcer; nephrotropic; IgE-related disorder;
 KW T helper; (TH)2-type immune response; vaccine; prophylactic; immune;
 KW interferon-gamma; interferon-alpha; type I interferon; IFN-alpha;
 KW IFN-omega; IFN-gamma; plasmacytoid dendritic cell; ss.
 XX
 OS Unidentified.
 XX
 XX WO2004058179-A2.
 XX
 XX 15-JUL-2004.
 XX
 XX 18-DEC-2003; 2003WO-US041001.
 XX
 XX 23-DEC-2002; 2002US-0436122P.
 XX
 XX 13-FEB-2003; 2003US-0447885P.
 XX
 XX 01-MAY-2003; 2003US-0467546P.
 XX
 XX (DYNA-) DYNAVAX TECHNOLOGIES.
 XX
 XX Dina D, Fearon KL, Marshall J;
 XX WPI; 2004-525782/50.
 XX
 XX Immunomodulatory polynucleotide useful for the treatment of e.g. atopic
 PT dermatitis comprising palindromic sequence comprising at least eight bases
 PT in length, which contains at least two dinucleotides and at least one
 PT trinucleotide.
 XX
 XX Example 1; SEQ ID NO 54; 119pp; English.
 XX
 CC The invention relates to a novel immunomodulatory polynucleotide (IMP)
 CC comprising a palindromic sequence. The palindromic sequence comprises at
 CC least 8 bases in length, which contains at least two dinucleotides (CG),
 CC and at least one trinucleotide (TCG) at or near the 5' end of the
 CC polynucleotide. The CG dinucleotides are separated by 0 - 5 bases. The 5'
 CC T of the (TCG) is positioned 0 - 3 bases from the 5' end of the
 CC polynucleotide. The (TCG) is separated from the 5' end of the
 CC palindromic sequence by 0 - 2 bases. The palindromic sequence includes
 CC all or part of the (TCG) sequence, where y= 1 or 2. The immunomodulatory
 CC polynucleotides have the following activities: antimicrobial,
 CC anti-allergic, antiasthmatic, dermatological, anti-inflammatory,
 CC ophthalmological, immunosuppressive, antibacterial, vasotropic,
 CC antiparasitic, virucide, hepatotropic, anti-HIV, cytostatic, antiulcer,
 CC and nephrotropic. The immunomodulatory polynucleotides can be used for
 CC ameliorating a symptom of an infectious disease and IgE-related disorder.
 CC The IMP's may also be used for the treatment of a disorder associated
 CC with a T helper (TH)2-type immune response (e.g. allergies, allergy-
 CC induced asthma or atopic dermatitis), individuals receiving vaccines such
 CC as therapeutic vaccines (e.g. vaccines comprising an allergy epitope, a
 CC mycobacterial epitope or a tumour associated epitope) or prophylactic
 CC vaccines. The IMP's can also be used for the treatment of e.g. food
 CC allergies, rhinitis, atopic dermatitis, conjunctivitis, urticaria, shock,
 CC Hymenoptera sting allergies and drug allergies and parasitic infections;
 CC viral disease e.g. Hepatitis B, Hepatitis C, Influenza, Acquired
 CC immunodeficiency syndrome (AIDS) and Herpes zoster; and cancer;

CC polynucleotide. The CG dinucleotides are separated by 0 - 5 bases. The 5' T of the (TCG)Y is positioned 0 - 3 bases from the 5' end of the CC polynucleotide. The (TCG)Y is separated from the 5' end of the palindromic sequence by 0 - 2 bases. The palindromic sequence includes all or part of the (TCG)Y sequence, where Y=1 or 2. The immunomodulatory CC polynucleotides have the following activities: antimicrobial, antiallergic, antiasthmatic, dermatological, antiinflammatory, ophthalmological, immunosuppressive, antibacterial, vasotropic, antiparasitic, virucide, hepatotropic, anti-HIV, cytostatic, antitumor, and nephrotropic. The immunomodulatory polynucleotides can be used for ameliorating a symptom of an infectious disease and IgE-related disorder. CC The IMP's may also be used for the treatment of a disorder associated with a T helper (TH)2-type immune response (e.g. allergies, allergy-induced asthma or atopic dermatitis), individuals receiving vaccines such as therapeutic vaccines (e.g. vaccines comprising an allergy epitope, a mycobacterial epitope or a tumour associated epitope) or prophylactic CC vaccines. The IMP's can also be used for the treatment of e.g. food allergies, rhinitis, atopic dermatitis, conjunctivitis, urticaria, shock, CC Hymenoptera sting allergies and drug allergies and parasitic infections; CC viral disease e.g. Hepatitis B, Hepatitis C, Influenza, Acquired CC immunodeficiency syndrome (AIDS) and Herpes zoster; and cancer; CC inflammatory disorder e.g. ulcerative colitis; fibrotic disorder e.g. CC idiopathic pulmonary fibrosis, scleroderma, cutaneous radiation-induced CC fibrosis, hepatic fibrosis including schistosomiasis-induced hepatic CC fibrosis, renal fibrosis. The IMP's may also be used to create a CC prophylactic vaccine to increase resistance to infection by bacterial or CC viral pathogens. The immunomodulatory polynucleotide modulates an immune CC response; or increases interferon-gamma; or interferon-alpha; effectively CC stimulates cytokines including type I interferons e.g. IFN-alpha and IFN-omega and IFN-gamma, production from human cells; effectively stimulates CC B cells to proliferate; and activates plasmacytoid dendritic cells to CC undergo maturation which can result in retardation of plasmacytoid CC dendritic cell apoptosis in culture. This polynucleotide sequence CC represents an immunomodulatory polynucleotide of the invention.

XX SQ Sequence 17 BP; 4 A; 4 C; 4 G; 5 T; 0 U; 0 Other;

Query Match 100.0%; Score 10; DB 13; Length 17;
Best Local Similarity 100.0%; Pred. No. 4.7e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTCG 10
| | | | |
Db 15 CGAACGTCG 6

RESULT 95

ABQ75165
ID ABQ75165 standard; DNA; 18 BP.

XX AC ABQ75165;

XX DT 05-NOV-2002 (first entry)

XX DE ISS immunomodulatory oligonucleotide SEQ ID NO:14.

XX Immunostimulatory sequence; ISS: immunomodulatory; immune response;
KW allergy; asthma; infectious disease; interferon-gamma; IFN-gamma;
KW idiopathic pulmonary fibrosis; viral infection; mycobacterial disease;
KW malaria; leishmaniasis; toxoplasmosis; schistosomiasis; clonorchiasis;
KW immunoglobulin E; IgE-related disorder; antiallergic; antiasthmatic;
KW virucide; antibacterial; protozoacide; ss.

XX OS Synthetic.

XX PN W0200252002-A2.

XX PD 04-JUL-2002.

XX PF 27-DEC-2001; 2001WO-US050821.

XX PR 27-DEC-2000; 2000US-0258675P.

XX PA

(DYNA-) DYNAVAX TECHNOLOGIES CORP.

XX Fearon KL, Dina D;

XX WPI; 2002-657426/70.

XX Immunomodulatory polynucleotide for modulating an immune response in a
PT subject suffering from disorders associated with Th2-type immune
PT response, e.g. allergy, or infectious disease, comprises an
PT immunostimulatory sequence.

XX Example 1; Page 20; 95pp; English.

XX The present invention describes an immunomodulatory polynucleotide (I) comprising an immunostimulatory sequence (ISS). Also described: (1) an immunomodulatory composition comprising (I); (2) an immunomodulatory polynucleotide/microcarrier (IMP/MC) complex, comprising (I) linked to a biodegradable MC, where the MC is less than 10 micrometre in size; and (3) a kit comprising (I). (I) has anti-allergic, antiasthmatic, virucide, CC antibacterial and protozoacide activities, and can be used as a modulator of immune response. (I) is useful for modulating an immune response in an individual suffering from disorders associated with a Th2-type immune CC response, especially an allergy or asthma, or an infectious disease. (I) is also useful for increasing interferon-gamma (IFN-gamma) in an individual having idiopathic pulmonary fibrosis, or IFN-alpha in an individual having a viral infection. (I) is further useful for ameliorating a symptom of an infectious disease caused by a cellular CC pathogen such as mycobacterial disease, malaria, leishmaniasis, toxoplasmosis, schistosomiasis and clonorchiasis in an individual, or a symptom of an immunoglobulin E (IgE)-related disorder, preferably an allergy-related disorder, in particular asthma in an individual. The CC present sequence represents an immunomodulatory oligonucleotide from the present invention

XX SQ Sequence 18 BP; 4 A; 4 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 100.0%; Score 10; DB 6; Length 18;
Best Local Similarity 100.0%; Pred. No. 4.7e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTCG 10
| | | | |
Db 4 CGAACGTCG 13

RESULT 96

ABQ75165/c

ID ABQ75165 standard; DNA; 18 BP.

XX AC ABQ75165;

XX DT 05-NOV-2002 (first entry)

XX DE ISS immunomodulatory oligonucleotide SEQ ID NO:14.

XX Immunostimulatory sequence; ISS: immunomodulatory; immune response;
KW allergy; asthma; infectious disease; interferon-gamma; IFN-gamma;
KW idiopathic pulmonary fibrosis; viral infection; mycobacterial disease;
KW malaria; leishmaniasis; toxoplasmosis; schistosomiasis; clonorchiasis;
KW immunoglobulin E; IgE-related disorder; antiallergic; antiasthmatic;
KW virucide; antibacterial; protozoacide; ss.

XX OS Synthetic.

XX PN W0200252002-A2.

XX PD 04-JUL-2002.

XX PF 27-DEC-2001; 2001WO-US050821.

XX PR 27-DEC-2000; 2000US-0258675P.

XX PA (DYNA-) DYNAVAX TECHNOLOGIES CORP.

XX FI Fearon KL, Dina D, Tuck SF;
 XX DR WPI; 2003-210159/20.
 XX XX
 PT Novel chimeric immunomodulatory compound having immunomodulatory
 PT activity, useful for modulating an immune response and for treating
 PT cancer, has nucleic acid moieties and non-nucleic acid spacer moieties.
 XX XX
 PS Disclosure; Page 33; 224pp; English.
 XX XX
 CC The invention relates to a novel chimeric immunomodulatory compound (CIC)
 CC having immunomodulatory activity, comprising two or more nucleic acid
 CC moieties and one or more non-nucleic acid spacer moieties, where at least
 CC one non-nucleic acid spacer moiety is covalently joined to two nucleic
 CC acid moieties, where the spacer is not a polypeptide, and at least one
 CC nucleic acid moiety comprises the sequence 5'-CG-3'. The chimeric
 CC immunomodulatory compounds more specifically contain the nucleic acid
 CC spacer moieties of linear hexaethylene glycol structure (HEG) subunits.
 CC CIC's are useful for modulating an immune response in an individual,
 CC where the individual suffers from a disorder associated with a Th2-type
 CC immune response which is an allergy or allergy-induced asthma, and an
 CC infectious disease. CIC is also useful for increasing IFN-gamma, or IFN-
 CC alpha, in an individual, where the individual has idiopathic pulmonary
 CC fibrosis, or a viral infection. CIC's are useful for ameliorating a
 CC symptom of an infectious disease, or an immunoglobulin E (IgE)-related
 CC disorder in an individual, where the IgE-related disorder is allergy, or
 CC an allergy-related disorder. CIC's are also useful for treating cancer
 CC and can be used for stimulating cellular immune system cells production
 CC in an individual. This polynucleotide sequence represents a DNA sequence
 CC which is a nucleic acid moiety part of a chimeric immunomodulatory compound
 CC of the invention.
 XX XX
 SQ Sequence 18 BP; 4 A; 4 C; 5 G; 5 T; 0 U; 0 Other;
 Query Match 100.0%; Score 10; DB 9; Length 18;
 Best Local Similarity 100.0%; Pred. No. 4.7e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 CGAACGTTTCG 10
 |||||
 DB 13 CGAACGTTTCG 4
 RESULT 99
 ADQ95294
 ID ADQ95294 standard; DNA; 18 BP.
 XX AC ADQ95294;
 XX DT 07-OCT-2004 (first entry)
 XX DE Branched immunomodulatory compound related oligonucleotide, SEQ ID 36.
 XX XX Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
 KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
 KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
 KW Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Antitumor;
 KW Gastrointestinal; Nephrotropic; Branched immunomodulatory compound;
 KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
 KW IFN-alpha; ss.
 XX OS Synthetic.
 XX XX WO2004058159-A2.
 XX PD 15-JUL-2004.
 XX PF 17-DEC-2003; 2003WO-US040417.
 XX PR 23-DEC-2002; 2002US-0436406P.
 XX PA (DYNA-) DYNAVAX TECHNOLOGIES CORP.

XX FI Fearon KL;
 XX DR WPI; 2004-561515/54.
 XX XX
 PT New branched immunomodulatory compound comprising at least three nucleic
 PT acid moieties and at least one branch-point nucleoside, useful for
 PT modulating an immune response in individual suffering e.g. allergy.
 XX XX
 PS Disclosure; SEQ ID NO 36; 183pp; English.
 XX XX
 CC The present invention relates to novel branched immunomodulatory
 CC compounds (BIC) comprising at least three nucleic acid moieties, at least
 CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
 CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
 CC e.g. the ability to stimulate interferon (IFN)-gamma production from
 CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
 CC alpha production from human peripheral blood mononuclear cells and the
 CC ability to stimulate B cell proliferation. The BIC compounds are useful
 CC for modulating an immune response in an individual suffering from a
 CC disorder associated with a T helper (Th)2-type immune response e.g.
 CC allergy, allergy-induced asthma or an infectious disease; for increasing
 CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
 CC are also useful for immunomodulation of cells and individuals; in the
 CC fields of biomedicine and immunology; for the manufacture of a medicament
 CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
 CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
 CC ameliorating an Igs-related disorder in an individual. The disorders
 CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
 CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
 CC cancer; infectious disease resistant to humoral immune responses (e.g.
 CC diseases caused by mycobacterial infections and intracellular pathogens,
 CC cellular pathogens e.g. bacteria or protozoans or by subcellular
 CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
 CC leprosy or M. marinum or M. ulcerans infections; herpes viruses; diseases
 CC caused by intracellular parasites such as malaria; leishmaniasis,
 CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
 CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
 CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
 CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.
 XX XX
 SQ Sequence 18 BP; 4 A; 4 C; 5 G; 5 T; 0 U; 0 Other;
 Query Match 100.0%; Score 10; DB 12; Length 18;
 Best Local Similarity 100.0%; Pred. No. 4.7e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 CGAACGTTTCG 10
 |||||
 DB 4 CGAACGTTTCG 13
 RESULT 100
 ADQ95294/c
 ID ADQ95294 standard; DNA; 18 BP.
 XX AC ADQ95294;
 XX DT 07-OCT-2004 (first entry)
 XX DE Branched immunomodulatory compound related oligonucleotide, SEQ ID 36.
 XX XX Antiallergic; Antiasthmatic; Antibacterial; Immunomodulator; Respiratory;
 KW Virucide; Antiinflammatory; Hepatotropic; Anti-HIV; Auditory;
 KW Dermatological; Immunosuppressive; Cytostatic; Protozoacide;
 KW Tuberculostatic; Antileprotic; Antiparasitic; Antimalarial; Antitumor;
 KW Gastrointestinal; Nephrotropic; Branched immunomodulatory compound;
 KW immunomodulatory; interferon-gamma; IFN-gamma; interferon-alpha;
 KW IFN-alpha; ss.
 XX OS Synthetic.
 XX XX

PN WO2004058159-A2.
 XX
 PD 15-JUL-2004.
 XX
 PF 17-DEC-2003; 2003WO-US040417.
 XX
 PR 23-DEC-2002; 2002US-0436406P.
 XX
 XX (DYNA-) DYNAXX TECHNOLOGIES CORP.
 PA
 XX Fearon KL;
 PI
 XX WPI; 2004-561515/54.
 DR
 XX
 XX New branched immunomodulatory compound comprising at least three nucleic
 PT acid moieties and at least one branch-point nucleoside, useful for
 PT modulating an immune response in individual suffering e.g. allergy.
 XX
 XX Disclosure; SEQ ID NO 36; 183pp; English.
 PS
 XX
 CC The present invention relates to novel branched immunomodulatory
 CC compounds (BIC) comprising at least three nucleic acid moieties, at least
 CC one of which comprises the nucleotide sequence 5'-CG-3', and at least one
 CC branch-point nucleoside. The BIC compounds has immunomodulatory activity
 CC e.g. the ability to stimulate interferon (IFN)-gamma production from
 CC human peripheral blood mononuclear cells, the ability to stimulate IFN-
 CC alpha production from human peripheral blood mononuclear cells and the
 CC ability to stimulate B cell proliferation. The BIC compounds are useful
 CC for modulating an immune response in an individual suffering from a
 CC disorder associated with a T helper (Th) 2-type immune response e.g.
 CC allergy, allergy-induced asthma or an infectious disease; for increasing
 CC secretion of IFN-gamma by blood cells in an individual. The BIC compounds
 CC are also useful for immunomodulation of cells and individuals; in the
 CC fields of biomedicine and immunology; for the manufacture of a medicament
 CC ; for treating idiopathic pulmonary fibrosis, viral infection (e.g.
 CC hepatitis B, hepatitis C, influenza, AIDS and herpes zoster); for
 CC ameliorating an Igg-related disorder in an individual. The disorders
 CC includes atopic dermatitis, eosinophilic gastrointestinal inflammation,
 CC eosinophilic esophagitis, and allergic bronchopulmonary aspergillosis;
 CC cancer; infectious disease resistant to humoral immune responses (e.g.
 CC diseases caused by mycobacterial infections and intracellular pathogens,
 CC cellular pathogens e.g. bacteria or protozoans or by subcellular
 CC pathogens e.g. viruses); mycobacterial diseases such as tuberculosis,
 CC leprosy or M. Marium or M. ulcerans infections; herpes viruses; diseases
 CC caused by intracellular parasites such as malaria; leishmaniasis,
 CC toxoplasmosis; parasitic diseases such as schistosomiasis; inflammatory
 CC disorders e.g. ulcerative colitis; scleroderma, cutaneous radiation-
 CC induced fibrosis, hepatic fibrosis including schistosomiasis-induced
 CC hepatic fibrosis; renal fibrosis. The present oligonucleotide was used in
 CC the BIC compounds of the invention.
 XX
 SQ Sequence 18 BP; 4 A; 4 C; 5 G; 5 T; 0 U; 0 Other;

Query Match 100.0%; Score 10; DB 12; Length 18;
 Best Local Similarity 100.0%; Pred. No. 4.7e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
 Db 13 CGAACGTTTCG 4

Search completed: June 30, 2005, 00:38:20
 Job time : 220.5 secs

Result No.	Query			ID	Description
	Score	Match	Length		
1	10	100.0	10	14	US-10-033-243-77
c 2	10	100.0	10	14	US-10-033-243-77
3	10	100.0	10	15	US-10-176-883-17
c 4	10	100.0	10	16	US-10-176-883-17
5	10	100.0	10	16	US-10-177-826-17
c 6	10	100.0	10	16	US-10-177-826-17
7	10	100.0	10	17	US-10-328-578-17

```

81      10 100.0 18 17 US-10-328-578-36 Sequence 36, Appl
82      10 100.0 18 17 US-10-328-578-36 Sequence 36, Appl
83      10 100.0 18 19 US-10-623-371-36 Sequence 36, Appl
84      10 100.0 18 19 US-10-623-371-36 Sequence 36, Appl
85      10 100.0 18 19 US-10-739-518-36 Sequence 36, Appl
86      10 100.0 18 19 US-10-739-518-36 Sequence 36, Appl
87      10 100.0 19 10 US-09-927-422A-16 Sequence 16, Appl
88      10 100.0 19 10 US-09-927-422A-16 Sequence 16, Appl
89      10 100.0 19 14 US-10-033-243-19 Sequence 19, Appl
90      10 100.0 19 14 US-10-033-243-19 Sequence 19, Appl
91      10 100.0 19 16 US-10-176-883-41 Sequence 41, Appl
92      10 100.0 19 16 US-10-176-883-41 Sequence 41, Appl
93      10 100.0 19 16 US-10-177-826-41 Sequence 41, Appl
94      10 100.0 19 16 US-10-177-826-41 Sequence 41, Appl
95      10 100.0 19 17 US-10-328-578-41 Sequence 41, Appl
96      10 100.0 19 17 US-10-328-578-41 Sequence 41, Appl
97      10 100.0 19 19 US-10-623-371-41 Sequence 41, Appl
98      10 100.0 19 19 US-10-623-371-41 Sequence 41, Appl
99      10 100.0 19 19 US-10-739-518-41 Sequence 41, Appl
100     10 100.0 19 19 US-10-739-518-41 Sequence 41, Appl

```

ALIGNMENTS

```

RESULT 1
US-10-033-243-77
; Sequence 77, Application US/10033243
; Publication No. US20030049266A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.
; APPLICANT: DINA, Dino
; TITLE OF INVENTION: IMMUNOMODULATORY POLYNUCLEOTIDES AND
; TITLE OF INVENTION: METHODS OF USING THE SAME
; FILE REFERENCE: 377882001800
; CURRENT APPLICATION NUMBER: US/10/033,243
; CURRENT FILING DATE: 2002-04-03
; PRIOR APPLICATION NUMBER: 60/258,675
; PRIOR FILING DATE: 2000-12-27
; NUMBER OF SEQ ID NOS: 133
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 77
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Polynucleotide containing CG
US-10-033-243-77

```

```

Query Match      100.0%; Score 10; DB 14; Length 10;
Best Local Similarity 100.0%; Pred. No. 7.3e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

QY      1 CGAACGTTTCG 10
Db      1 CGAACGTTTCG 10

```

```

RESULT 2
US-10-033-243-77/c
; Sequence 77, Application US/10033243
; Publication No. US20030049266A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.
; APPLICANT: DINA, Dino
; TITLE OF INVENTION: IMMUNOMODULATORY POLYNUCLEOTIDES AND
; TITLE OF INVENTION: METHODS OF USING THE SAME
; FILE REFERENCE: 377882001800
; CURRENT APPLICATION NUMBER: US/10/033,243
; CURRENT FILING DATE: 2002-04-03
; PRIOR APPLICATION NUMBER: 60/258,675
; PRIOR FILING DATE: 2000-12-27
; NUMBER OF SEQ ID NOS: 133

```

```

; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 77
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Polynucleotide containing CG
US-10-033-243-77
Query Match      100.0%; Score 10; DB 14; Length 10;
Best Local Similarity 100.0%; Pred. No. 7.3e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

QY      1 CGAACGTTTCG 10
Db      1 CGAACGTTTCG 1

```

```

RESULT 3
US-10-176-883-17
; Sequence 17, Application US/10176883
; Publication No. US20030175731A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-I
; FILE REFERENCE: 377882002000
; CURRENT APPLICATION NUMBER: US/10/176,883
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 17
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-176-883-17

```

```

Query Match      100.0%; Score 10; DB 16; Length 10;
Best Local Similarity 100.0%; Pred. No. 7.3e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

QY      1 CGAACGTTTCG 10
Db      1 CGAACGTTTCG 10

```

```

RESULT 4
US-10-176-883-17/c
; Sequence 17, Application US/10176883
; Publication No. US20030175731A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-I
; FILE REFERENCE: 377882002000
; CURRENT APPLICATION NUMBER: US/10/176,883
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSeq for Windows Version 4.0

```

```
; SEQ ID NO 17
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-176-883-17

Query Match      100.0%; Score 10; DB 16; Length 10;
Best Local Similarity 100.0%; Pred. No. 7.3e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 10 CGAACGTTTCG 1

RESULT 5
US-10-177-826-17
; Sequence 17, Application US/10177826
; Publication No. US20030199466A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-II
; FILE REFERENCE: 377882002001
; CURRENT APPLICATION NUMBER: US/10/177,826
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 17
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-177-826-17

Query Match      100.0%; Score 10; DB 16; Length 10;
Best Local Similarity 100.0%; Pred. No. 7.3e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 1 CGAACGTTTCG 10

RESULT 6
US-10-177-826-17/c
; Sequence 17, Application US/10177826
; Publication No. US20030199466A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-II
; FILE REFERENCE: 377882002001
; CURRENT APPLICATION NUMBER: US/10/177,826
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 17

; SEQ ID NO 17
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-177-826-17/c

Query Match      100.0%; Score 10; DB 16; Length 10;
Best Local Similarity 100.0%; Pred. No. 7.3e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 1 CGAACGTTTCG 10

RESULT 7
US-10-328-578-17
; Sequence 17, Application US/10328578
; Publication No. US20030225016A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-III
; FILE REFERENCE: 377882002020
; CURRENT APPLICATION NUMBER: US/10/328,578
; CURRENT FILING DATE: 2003-05-16
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/375,253
; PRIOR FILING DATE: 2002-04-23
; PRIOR APPLICATION NUMBER: US 10/177,826
; PRIOR FILING DATE: 2002-06-21
; NUMBER OF SEQ ID NOS: 152
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 17
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-328-578-17

Query Match      100.0%; Score 10; DB 17; Length 10;
Best Local Similarity 100.0%; Pred. No. 7.3e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 1 CGAACGTTTCG 10

RESULT 8
US-10-328-578-17/c
; Sequence 17, Application US/10328578
; Publication No. US20030225016A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-III
; FILE REFERENCE: 377882002020
; CURRENT APPLICATION NUMBER: US/10/328,578
; CURRENT FILING DATE: 2003-05-16
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
```

; PRIOR APPLICATION NUMBER: US 60/375,253
; PRIOR FILING DATE: 2002-04-23
; PRIOR APPLICATION NUMBER: US 10/177,826
; PRIOR FILING DATE: 2002-06-21
; NUMBER OF SEQ ID NOS: 152
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 17
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-328-578-17

Query Match 100.0%; Score 10; DB 17; Length 10;
Best Local Similarity 100.0%; Pred. No. 7.3e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
|||
Db 10 CGAACGTTTCG 1

RESULT 9

US-10-623-371-17
; Sequence 17, Application US/10623371
; Publication No. US20040132677A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.
; APPLICANT: DINA, Dino
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-IV
; FILE REFERENCE: 377882002021
; CURRENT APPLICATION NUMBER: US/10/623,371
; CURRENT FILING DATE: 2003-07-18
; PRIOR APPLICATION NUMBER: US 10/328,578
; PRIOR FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 10/177,826
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 158
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 17
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-623-371-17

Query Match 100.0%; Score 10; DB 19; Length 10;
Best Local Similarity 100.0%; Pred. No. 7.3e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
|||
Db 1 CGAACGTTTCG 10

RESULT 10

US-10-623-371-17/c
; Sequence 17, Application US/10623371
; Publication No. US20040132677A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.
; APPLICANT: DINA, Dino
; APPLICANT: TUCK, Stephen F.

; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-IV
; FILE REFERENCE: 377882002021
; CURRENT APPLICATION NUMBER: US/10/623,371
; CURRENT FILING DATE: 2003-07-18
; PRIOR APPLICATION NUMBER: US 10/328,578
; PRIOR FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 10/177,826
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 158
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 17
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-623-371-17

Query Match 100.0%; Score 10; DB 19; Length 10;
Best Local Similarity 100.0%; Pred. No. 7.3e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
|||
Db 10 CGAACGTTTCG 1

RESULT 11

US-10-739-518-17
; Sequence 17, Application US/10739518
; Publication No. US20040136948A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; TITLE OF INVENTION: BRANCHED IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME
; FILE REFERENCE: 377882003200
; CURRENT APPLICATION NUMBER: US/10/739,518
; CURRENT FILING DATE: 2003-12-17
; PRIOR APPLICATION NUMBER: US 60/436,406
; PRIOR FILING DATE: 2002-12-23
; NUMBER OF SEQ ID NOS: 148
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 17
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Construct
US-10-739-518-17

Query Match 100.0%; Score 10; DB 19; Length 10;
Best Local Similarity 100.0%; Pred. No. 7.3e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
|||
Db 1 CGAACGTTTCG 10

RESULT 12

US-10-739-518-17/c
; Sequence 17, Application US/10739518
; Publication No. US20040136948A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; TITLE OF INVENTION: BRANCHED IMMUNOMODULATORY COMPOUNDS AND

; TITLE OF INVENTION: METHODS OF USING THE SAME
; FILE REFERENCE: 377882003200
; CURRENT APPLICATION NUMBER: US/10/739,518
; CURRENT FILING DATE: 2003-12-17
; PRIOR APPLICATION NUMBER: US 60/436,406
; PRIOR FILING DATE: 2002-12-23
; NUMBER OF SEQ ID NOS: 148
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 17
; LENGTH: 10
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Construct
US-10-739-518-17

Query Match 100.0%; Score 10; DB 19; Length 10;
Best Local Similarity 100.0%; Pred. No. 7.3e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 10 CGAACGTTTCG 1

RESULT 13

US-10-033-243-102
; Sequence 102, Application US/10033243
; Publication No. US20030049266A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.
; APPLICANT: DINA, Dino
; TITLE OF INVENTION: IMMUNOMODULATORY POLYNUCLEOTIDES AND
; TITLE OF INVENTION: METHODS OF USING THE SAME
; FILE REFERENCE: 377882001800
; CURRENT APPLICATION NUMBER: US/10/033,243
; CURRENT FILING DATE: 2002-04-03
; PRIOR APPLICATION NUMBER: 60/258,675
; PRIOR FILING DATE: 2000-12-27
; NUMBER OF SEQ ID NOS: 133
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 102
; LENGTH: 11
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Polynucleotide containing CG
US-10-033-243-102

Query Match 100.0%; Score 10; DB 14; Length 11;
Best Local Similarity 100.0%; Pred. No. 7.3e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 2 CGAACGTTTCG 11

RESULT 14

US-10-033-243-102/c
; Sequence 102, Application US/10033243
; Publication No. US20030049266A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.
; APPLICANT: DINA, Dino
; TITLE OF INVENTION: IMMUNOMODULATORY POLYNUCLEOTIDES AND
; TITLE OF INVENTION: METHODS OF USING THE SAME
; FILE REFERENCE: 377882001800
; CURRENT APPLICATION NUMBER: US/10/033,243
; CURRENT FILING DATE: 2002-04-03
; PRIOR APPLICATION NUMBER: 60/258,675
; PRIOR FILING DATE: 2000-12-27
; NUMBER OF SEQ ID NOS: 133

; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 102
; LENGTH: 11
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Polynucleotide containing CG
US-10-033-243-102

Query Match 100.0%; Score 10; DB 14; Length 11;
Best Local Similarity 100.0%; Pred. No. 7.3e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 11 CGAACGTTTCG 2

RESULT 15

US-10-176-883-103
; Sequence 103, Application US/10176883
; Publication No. US20030175731A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen
; APPLICANT: DINA, Dino
; APPLICANT: TUCK, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-I
; FILE REFERENCE: 377882002000
; CURRENT APPLICATION NUMBER: US/10/176,883
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 103
; LENGTH: 11
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-176-883-103

Query Match 100.0%; Score 10; DB 16; Length 11;
Best Local Similarity 100.0%; Pred. No. 7.3e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 2 CGAACGTTTCG 11

RESULT 16

US-10-176-883-103/c
; Sequence 103, Application US/10176883
; Publication No. US20030175731A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen
; APPLICANT: DINA, Dino
; APPLICANT: TUCK, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-I
; FILE REFERENCE: 377882002000
; CURRENT APPLICATION NUMBER: US/10/176,883
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSEQ for Windows Version 4.0

```
; SEQ ID NO 103
; LENGTH: 11
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-176-883-103

Query Match      100.0%; Score 10; DB 16; Length 11;
Best Local Similarity 100.0%; Pred. No. 7.3e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 CGAACGTTTCG 10
        |||||
Db       11 CGAACGTTTCG 2

RESULT 17
US-10-177-826-103
; Sequence 103, Application US/10177826
; Publication No. US20030199466A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-II
; FILE REFERENCE: 377882002001
; CURRENT APPLICATION NUMBER: US/10/177,826
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 103
; LENGTH: 11
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-177-826-103

Query Match      100.0%; Score 10; DB 16; Length 11;
Best Local Similarity 100.0%; Pred. No. 7.3e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 CGAACGTTTCG 10
        |||||
Db       2 CGAACGTTTCG 11

RESULT 18
US-10-177-826-103/c
; Sequence 103, Application US/10177826
; Publication No. US20030199466A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-II
; FILE REFERENCE: 377882002001
; CURRENT APPLICATION NUMBER: US/10/177,826
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 103

; SEQ ID NO 103
; LENGTH: 11
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-177-826-103

Query Match      100.0%; Score 10; DB 16; Length 11;
Best Local Similarity 100.0%; Pred. No. 7.3e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 CGAACGTTTCG 10
        |||||
Db       2 CGAACGTTTCG 11

RESULT 19
US-10-328-578-103
; Sequence 103, Application US/10328578
; Publication No. US20030225016A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-III
; FILE REFERENCE: 377882002020
; CURRENT APPLICATION NUMBER: US/10/328,578
; CURRENT FILING DATE: 2003-05-16
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 10/177,826
; NUMBER OF SEQ ID NOS: 152
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 103
; LENGTH: 11
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-328-578-103

Query Match      100.0%; Score 10; DB 17; Length 11;
Best Local Similarity 100.0%; Pred. No. 7.3e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 CGAACGTTTCG 10
        |||||
Db       2 CGAACGTTTCG 11

RESULT 20
US-10-328-578-103/c
; Sequence 103, Application US/10328578
; Publication No. US20030225016A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-III
; FILE REFERENCE: 377882002020
; CURRENT APPLICATION NUMBER: US/10/328,578
; CURRENT FILING DATE: 2003-05-16
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
```

; PRIOR APPLICATION NUMBER: US 60/375,253
 ; PRIOR FILING DATE: 2002-04-23
 ; PRIOR APPLICATION NUMBER: US 10/177,826
 ; PRIOR FILING DATE: 2002-06-21
 ; NUMBER OF SEQ ID NOS: 152
 ; SOFTWARE: FastSeq for Windows Version 4.0
 ; SEQ ID NO 103
 ; LENGTH: 11
 ; TYPE: DNA
 ; ORGANISM: Artificial Sequence
 ; FEATURE:
 ; OTHER INFORMATION: Synthetic construct
 US-10-328-578-103

Query Match 100.0%; Score 10; DB 17; Length 11;
 Best Local Similarity 100.0%; Pred. No. 7.3e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
 Db 11 CGAACGTTTCG 2
 |||||

RESULT 21

US-10-623-371-103
 ; Sequence 103, Application US/10623371
 ; Publication No. US20040132677A1
 ; GENERAL INFORMATION:
 ; APPLICANT: FEARON, Karen L.
 ; APPLICANT: DINA, Dino
 ; APPLICANT: TUCK, Stephen F.

; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
 ; TITLE OF INVENTION: METHODS OF USING THE SAME-IV
 ; FILE REFERENCE: 377882002021
 ; CURRENT APPLICATION NUMBER: US/10/623,371
 ; CURRENT FILING DATE: 2003-07-18

; PRIOR APPLICATION NUMBER: US 10/328,578
 ; PRIOR FILING DATE: 2002-12-23
 ; PRIOR APPLICATION NUMBER: US 10/176,883
 ; PRIOR FILING DATE: 2002-06-21
 ; PRIOR APPLICATION NUMBER: US 10/177,826
 ; PRIOR FILING DATE: 2002-06-21
 ; PRIOR APPLICATION NUMBER: US 60/299,883
 ; PRIOR FILING DATE: 2001-06-21
 ; PRIOR APPLICATION NUMBER: US 60/375,253
 ; PRIOR FILING DATE: 2002-04-23
 ; NUMBER OF SEQ ID NOS: 158
 ; SOFTWARE: FastSeq for Windows Version 4.0
 ; SEQ ID NO 103
 ; LENGTH: 11
 ; TYPE: DNA
 ; ORGANISM: Artificial Sequence
 ; FEATURE:
 ; OTHER INFORMATION: Synthetic construct
 US-10-623-371-103

Query Match 100.0%; Score 10; DB 19; Length 11;
 Best Local Similarity 100.0%; Pred. No. 7.3e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
 Db 2 CGAACGTTTCG 11
 |||||

RESULT 22

US-10-623-371-103/c
 ; Sequence 103, Application US/10623371
 ; Publication No. US20040132677A1
 ; GENERAL INFORMATION:
 ; APPLICANT: FEARON, Karen L.
 ; APPLICANT: DINA, Dino
 ; APPLICANT: TUCK, Stephen F.

; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
 ; TITLE OF INVENTION: METHODS OF USING THE SAME-IV
 ; FILE REFERENCE: 377882002021
 ; CURRENT APPLICATION NUMBER: US/10/623,371
 ; CURRENT FILING DATE: 2003-07-18
 ; PRIOR APPLICATION NUMBER: US 10/328,578
 ; PRIOR FILING DATE: 2002-12-23
 ; PRIOR APPLICATION NUMBER: US 10/176,883
 ; PRIOR FILING DATE: 2002-06-21
 ; PRIOR APPLICATION NUMBER: US 10/177,826
 ; PRIOR FILING DATE: 2002-06-21
 ; PRIOR APPLICATION NUMBER: US 60/299,883
 ; PRIOR FILING DATE: 2001-06-21
 ; PRIOR APPLICATION NUMBER: US 60/375,253
 ; PRIOR FILING DATE: 2002-04-23
 ; NUMBER OF SEQ ID NOS: 158
 ; SOFTWARE: FastSeq for Windows Version 4.0
 ; SEQ ID NO 103
 ; LENGTH: 11
 ; TYPE: DNA
 ; ORGANISM: Artificial Sequence
 ; FEATURE:
 ; OTHER INFORMATION: Synthetic construct
 US-10-623-371-103

Query Match 100.0%; Score 10; DB 19; Length 11;
 Best Local Similarity 100.0%; Pred. No. 7.3e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
 Db 11 CGAACGTTTCG 2
 |||||

RESULT 23

US-10-739-518-103
 ; Sequence 103, Application US/10739518
 ; Publication No. US20040136948A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Fearon, Karen L.
 ; TITLE OF INVENTION: BRANCHED IMMUNOMODULATORY COMPOUNDS AND
 ; TITLE OF INVENTION: METHODS OF USING THE SAME
 ; FILE REFERENCE: 377882003200
 ; CURRENT APPLICATION NUMBER: US/10/739,518
 ; CURRENT FILING DATE: 2003-12-17
 ; PRIOR APPLICATION NUMBER: US 60/436,406
 ; PRIOR FILING DATE: 2002-12-23
 ; NUMBER OF SEQ ID NOS: 148
 ; SOFTWARE: FastSeq for Windows Version 4.0
 ; SEQ ID NO 103
 ; LENGTH: 11
 ; TYPE: DNA
 ; ORGANISM: Artificial Sequence
 ; FEATURE:
 ; OTHER INFORMATION: Synthetic Construct
 US-10-739-518-103

Query Match 100.0%; Score 10; DB 19; Length 11;
 Best Local Similarity 100.0%; Pred. No. 7.3e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
 Db 2 CGAACGTTTCG 11
 |||||

RESULT 24

US-10-739-518-103/c
 ; Sequence 103, Application US/10739518
 ; Publication No. US20040136948A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Fearon, Karen L.
 ; TITLE OF INVENTION: BRANCHED IMMUNOMODULATORY COMPOUNDS AND

; TITLE OF INVENTION: METHODS OF USING THE SAME
; FILE REFERENCE: 377882003200
; CURRENT APPLICATION NUMBER: US/10/739,518
; CURRENT FILING DATE: 2003-12-17
; PRIOR APPLICATION NUMBER: US 60/436,406
; PRIOR FILING DATE: 2002-12-23
; NUMBER OF SEQ ID NOS: 148
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 103
; LENGTH: 11
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Construct
US-10-739-518-103

Query Match 100.0%; Score 10; DB 19; Length 11;
Best Local Similarity 100.0%; Pred. No. 7.3e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 11 CGAACGTTTCG 2
|||||

RESULT 25

US-10-623-371-155
; Sequence 155, Application US/10623371
; Publication No. US20040132677A1
; GENERAL INFORMATION:

; APPLICANT: DINA, Dino
; APPLICANT: TUCK, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE REFERENCE: 377882002021
; CURRENT APPLICATION NUMBER: US/10/623,371
; CURRENT FILING DATE: 2003-07-18
; PRIOR APPLICATION NUMBER: US 10/328,578
; PRIOR FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 10/177,826
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 158
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 155
; LENGTH: 12
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Construct
US-10-623-371-155

Query Match 100.0%; Score 10; DB 19; Length 12;
Best Local Similarity 100.0%; Pred. No. 7.3e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 2 CGAACGTTTCG 11
|||||

RESULT 26

US-10-623-371-155/c
; Sequence 155, Application US/10623371
; Publication No. US20040132677A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.

; APPLICANT: DINA, Dino
; APPLICANT: TUCK, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE REFERENCE: 377882002021
; CURRENT APPLICATION NUMBER: US/10/623,371
; CURRENT FILING DATE: 2003-07-18
; PRIOR APPLICATION NUMBER: US 10/328,578
; PRIOR FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 10/177,826
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 158
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 155
; LENGTH: 12
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Construct
US-10-623-371-155

Query Match 100.0%; Score 10; DB 19; Length 12;
Best Local Similarity 100.0%; Pred. No. 7.3e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 11 CGAACGTTTCG 2
|||||

RESULT 27

US-10-739-518-135
; Sequence 135, Application US/10739518
; Publication No. US20040136948A1
; GENERAL INFORMATION:

; APPLICANT: Fearon, Karen L.
; TITLE OF INVENTION: BRANCHED IMMUNOMODULATORY COMPOUNDS AND
; FILE REFERENCE: 377882003200
; CURRENT APPLICATION NUMBER: US/10/739,518
; CURRENT FILING DATE: 2003-12-17
; PRIOR APPLICATION NUMBER: US 60/436,406
; PRIOR FILING DATE: 2002-12-23
; NUMBER OF SEQ ID NOS: 148
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 135
; LENGTH: 12
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Construct
US-10-739-518-135

Query Match 100.0%; Score 10; DB 19; Length 12;
Best Local Similarity 100.0%; Pred. No. 7.3e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 2 CGAACGTTTCG 11
|||||

RESULT 28

US-10-739-518-135/c
; Sequence 135, Application US/10739518
; Publication No. US20040136948A1
; GENERAL INFORMATION:

; APPLICANT: Fearon, Karen L.
; TITLE OF INVENTION: BRANCHED IMMUNOMODULATORY COMPOUNDS AND
; METHODS OF USING THE SAME
; FILE REFERENCE: 377882003200
; CURRENT APPLICATION NUMBER: US/10/739,518
; PRIOR FILING DATE: 2003-12-17
; PRIOR APPLICATION NUMBER: US 60/436,406
; PRIOR FILING DATE: 2002-12-23
; NUMBER OF SEQ ID NOS: 148
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 135
; LENGTH: 12
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Construct
US-10-739-518-135

Query Match 100.0%; Score 10; DB 19; Length 12;
Best Local Similarity 100.0%; Pred. No. 7.3e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 11 CGAACGTTTCG 2

RESULT 29

US-10-952-254-51
; Sequence 51, Application US/10952254
; Publication No. US20050130911A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Art
; APPLICANT: Vollmer, Joerg
; APPLICANT: Uhlmann, Eugen
; TITLE OF INVENTION: NUCLEIC ACID-LIPOPHILIC CONJUGATES
; FILE REFERENCE: C1037.70050US01
; CURRENT APPLICATION NUMBER: US/10/952,254
; CURRENT FILING DATE: 2004-09-27
; PRIOR FILING DATE: 2003-09-25
; PRIOR APPLICATION NUMBER: 60/505977
; NUMBER OF SEQ ID NOS: 116
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 51
; LENGTH: 12
; TYPE: DNA
; ORGANISM: Artificial sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
; NAME/KEY: misc feature
; LOCATION: (12)..(12)
; OTHER INFORMATION: cholesterol
US-10-952-254-51

Query Match 100.0%; Score 10; DB 22; Length 12;
Best Local Similarity 100.0%; Pred. No. 7.3e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 2 CGAACGTTTCG 11

RESULT 30

US-10-952-254-51/c
; Sequence 51, Application US/10952254
; Publication No. US20050130911A1
; GENERAL INFORMATION:
; APPLICANT: Krieg, Art
; APPLICANT: Vollmer, Joerg
; APPLICANT: Uhlmann, Eugen
; TITLE OF INVENTION: NUCLEIC ACID-LIPOPHILIC CONJUGATES

; FILE REFERENCE: C1037.70050US01
; CURRENT APPLICATION NUMBER: US/10/952,254
; CURRENT FILING DATE: 2004-09-27
; PRIOR APPLICATION NUMBER: 60/505977
; PRIOR FILING DATE: 2003-09-25
; NUMBER OF SEQ ID NOS: 116
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO 51
; LENGTH: 12
; TYPE: DNA
; ORGANISM: Artificial sequence
; FEATURE:
; OTHER INFORMATION: Synthetic oligonucleotide
; NAME/KEY: misc feature
; LOCATION: (12)..(12)
; OTHER INFORMATION: cholesterol
US-10-952-254-51

Query Match 100.0%; Score 10; DB 22; Length 12;
Best Local Similarity 100.0%; Pred. No. 7.3e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 11 CGAACGTTTCG 2

RESULT 31

US-10-033-243-97
; Sequence 97, Application US/10033243
; Publication No. US20030049266A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; APPLICANT: DINA, Dino
; TITLE OF INVENTION: IMMUNOMODULATORY POLYNUCLEOTIDES AND
; METHODS OF USING THE SAME
; FILE REFERENCE: 377882001800
; CURRENT APPLICATION NUMBER: US/10/033,243
; CURRENT FILING DATE: 2002-04-03
; PRIOR APPLICATION NUMBER: 60/258,675
; PRIOR FILING DATE: 2000-12-27
; NUMBER OF SEQ ID NOS: 133
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 97
; LENGTH: 13
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Polynucleotide containing CG
US-10-033-243-97

Query Match 100.0%; Score 10; DB 14; Length 13;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 4 CGAACGTTTCG 13

RESULT 32

US-10-033-243-97/c
; Sequence 97, Application US/10033243
; Publication No. US20030049266A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; APPLICANT: DINA, Dino
; TITLE OF INVENTION: IMMUNOMODULATORY POLYNUCLEOTIDES AND
; METHODS OF USING THE SAME
; FILE REFERENCE: 377882001800
; CURRENT APPLICATION NUMBER: US/10/033,243
; CURRENT FILING DATE: 2002-04-03

```
; PRIOR APPLICATION NUMBER: 60/258,675
; PRIOR FILING DATE: 2000-12-27
; NUMBER OF SEQ ID NOS: 133
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 97
; LENGTH: 13
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: 2
; OTHER INFORMATION: Polynucleotide containing CG
US-10-033-243-97

Query Match          100.0%; Score 10; DB 14; Length 13;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
   |||||
Db 13 CGAACGTTTCG 4

RESULT 33
US-10-033-243-99
; Sequence 99, Application US/10033243
; Publication No. US20030049266A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.
; TITLE OF INVENTION: IMMUNOMODULATORY POLYNUCLEOTIDES AND
; FILE REFERENCE: 377882001800
; CURRENT APPLICATION NUMBER: US/10/033,243
; CURRENT FILING DATE: 2002-04-03
; PRIOR APPLICATION NUMBER: 60/258,675
; PRIOR FILING DATE: 2000-12-27
; NUMBER OF SEQ ID NOS: 133
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 99
; LENGTH: 13
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: 2
; OTHER INFORMATION: Polynucleotide containing CG
US-10-033-243-99

Query Match          100.0%; Score 10; DB 14; Length 13;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
   |||||
Db 13 CGAACGTTTCG 4

RESULT 34
US-10-033-243-99/c
; Sequence 99, Application US/10033243
; Publication No. US20030049266A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.
; TITLE OF INVENTION: IMMUNOMODULATORY POLYNUCLEOTIDES AND
; FILE REFERENCE: 377882001800
; CURRENT APPLICATION NUMBER: US/10/033,243
; CURRENT FILING DATE: 2002-04-03
; PRIOR APPLICATION NUMBER: 60/258,675
; PRIOR FILING DATE: 2000-12-27
; NUMBER OF SEQ ID NOS: 133
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 99
; LENGTH: 13
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: 2
; OTHER INFORMATION: Polynucleotide containing CG
US-10-033-243-99

Query Match          100.0%; Score 10; DB 14; Length 13;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
   |||||
Db 4 CGAACGTTTCG 13

RESULT 35
US-10-739-518-139
; Sequence 139, Application US/10739518
; Publication No. US20040136948A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; TITLE OF INVENTION: BRANCHED IMMUNOMODULATORY COMPOUNDS AND
; FILE REFERENCE: 377882003200
; CURRENT APPLICATION NUMBER: US/10/739,518
; CURRENT FILING DATE: 2003-12-17
; PRIOR APPLICATION NUMBER: US 60/436,406
; PRIOR FILING DATE: 2002-12-23
; NUMBER OF SEQ ID NOS: 148
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 139
; LENGTH: 13
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Construct
US-10-739-518-139

Query Match          100.0%; Score 10; DB 19; Length 13;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
   |||||
Db 2 CGAACGTTTCG 11

RESULT 36
US-10-739-518-139/c
; Sequence 139, Application US/10739518
; Publication No. US20040136948A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; TITLE OF INVENTION: BRANCHED IMMUNOMODULATORY COMPOUNDS AND
; FILE REFERENCE: 377882003200
; CURRENT APPLICATION NUMBER: US/10/739,518
; CURRENT FILING DATE: 2003-12-17
; PRIOR APPLICATION NUMBER: US 60/436,406
; PRIOR FILING DATE: 2002-12-23
; NUMBER OF SEQ ID NOS: 148
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 139
; LENGTH: 13
; TYPE: DNA
; ORGANISM: Artificial Sequence
```

FEATURE:
; OTHER INFORMATION: Synthetic Construct
US-10-739-518-139

Query Match 100.0%; Score 10; DB 19; Length 13;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 11 CGAACGTTTCG 2

RESULT 37

US-10-257-017B-16007
; Sequence 16007, Application US/10257017B
; Publication No. US20040241651A1
; GENERAL INFORMATION:
; APPLICANT: Alexander Olek
; APPLICANT: Christian Piepenbrock
; APPLICANT: Kurt Berlin
; TITLE OF INVENTION: Detection of single nucleotide polymorphisms [SNPs] and cytosine
; FILE REFERENCE: E01/1193/WO
; CURRENT APPLICATION NUMBER: US/10/257,017B
; CURRENT FILING DATE: 2002-10-07
; PRIOR APPLICATION NUMBER: DE 10019173.8
; PRIOR FILING DATE: 2000-04-07
; NUMBER OF SEQ ID NOS: 382046
; SEQ ID NO 16007
; LENGTH: 13
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Oligonucleotide for detection of SNP TSC0003513

US-10-257-017B-16007

Query Match 100.0%; Score 10; DB 20; Length 13;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 2 CGAACGTTTCG 11

RESULT 38

US-10-257-017B-16007/c
; Sequence 16007, Application US/10257017B
; Publication No. US20040241651A1
; GENERAL INFORMATION:
; APPLICANT: Alexander Olek
; APPLICANT: Christian Piepenbrock
; APPLICANT: Kurt Berlin
; TITLE OF INVENTION: Detection of single nucleotide polymorphisms [SNPs] and cytosine
; FILE REFERENCE: E01/1193/WO
; CURRENT APPLICATION NUMBER: US/10/257,017B
; CURRENT FILING DATE: 2002-10-07
; PRIOR APPLICATION NUMBER: DE 10019173.8
; PRIOR FILING DATE: 2000-04-07
; NUMBER OF SEQ ID NOS: 382046
; SEQ ID NO 16007
; LENGTH: 13
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Oligonucleotide for detection of SNP TSC0003513

US-10-257-017B-16007

Query Match 100.0%; Score 10; DB 20; Length 13;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 11 CGAACGTTTCG 2

RESULT 39

US-10-257-017B-16008
; Sequence 16008, Application US/10257017B
; Publication No. US20040241651A1
; GENERAL INFORMATION:
; APPLICANT: Alexander Olek
; APPLICANT: Christian Piepenbrock
; APPLICANT: Kurt Berlin
; TITLE OF INVENTION: Detection of single nucleotide polymorphisms [SNPs] and cytosine
; FILE REFERENCE: E01/1193/WO
; CURRENT APPLICATION NUMBER: US/10/257,017B
; CURRENT FILING DATE: 2002-10-07
; PRIOR APPLICATION NUMBER: DE 10019173.8
; PRIOR FILING DATE: 2000-04-07
; NUMBER OF SEQ ID NOS: 382046
; SEQ ID NO 16008
; LENGTH: 13
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Oligonucleotide for detection of SNP TSC0003513

Query Match 100.0%; Score 10; DB 20; Length 13;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 3 CGAACGTTTCG 12

RESULT 40

US-10-257-017B-16008/c
; Sequence 16008, Application US/10257017B
; Publication No. US20040241651A1
; GENERAL INFORMATION:
; APPLICANT: Alexander Olek
; APPLICANT: Christian Piepenbrock
; APPLICANT: Kurt Berlin
; TITLE OF INVENTION: Detection of single nucleotide polymorphisms [SNPs] and cytosine
; FILE REFERENCE: E01/1193/WO
; CURRENT APPLICATION NUMBER: US/10/257,017B
; CURRENT FILING DATE: 2002-10-07
; PRIOR APPLICATION NUMBER: DE 10019173.8
; PRIOR FILING DATE: 2000-04-07
; NUMBER OF SEQ ID NOS: 382046
; SEQ ID NO 16008
; LENGTH: 13
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Oligonucleotide for detection of SNP TSC0003513

Query Match 100.0%; Score 10; DB 20; Length 13;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 12 CGAACGTTTCG 3

RESULT 41

RESULT 43
US-10-176-883-98
: Sequence 98 Application US/10176883
: Publication No US20030175731A1
: GENERAL INFORMATION:
: APPLICANT: Fearon, Karen
: APPLICANT: Dina, Dino
: APPLICANT: Tuck, Stephen

```

RESULT 45
US-10-176-883-104
; Sequence 104, Application US/10176883
; Publication No. US2003017531A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOM

```

; TITLE OF INVENTION: METHODS OF USING THE SAME-I
; FILE REFERENCE: 37782002000
; CURRENT APPLICATION NUMBER: US/10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 104
; LENGTH: 14
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-176-883-104

Query Match 100.0%; Score 10; DB 16; Length 14;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 5 CGAACGTTTCG 14

RESULT 46

US-10-176-883-104/c
; Sequence 104, Application US/10176883
; Publication No. US20030175731A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-I
; FILE REFERENCE: 37782002000
; CURRENT APPLICATION NUMBER: US/10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 104
; LENGTH: 14
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-176-883-104

Query Match 100.0%; Score 10; DB 16; Length 14;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 14 CGAACGTTTCG 5

RESULT 47

US-10-177-826-98
; Sequence 98, Application US/10177826
; Publication No. US20030199466A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-II

; FILE REFERENCE: 37782002001
; CURRENT APPLICATION NUMBER: US/10/177,826
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 98
; LENGTH: 14
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-177-826-98

Query Match 100.0%; Score 10; DB 16; Length 14;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 5 CGAACGTTTCG 14

RESULT 48

US-10-177-826-98/c
; Sequence 98, Application US/10177826
; Publication No. US20030199466A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-II
; FILE REFERENCE: 37782002001
; CURRENT APPLICATION NUMBER: US/10/177,826
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 98
; LENGTH: 14
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-177-826-98

Query Match 100.0%; Score 10; DB 16; Length 14;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 14 CGAACGTTTCG 5

RESULT 49

US-10-177-826-104
; Sequence 104, Application US/10177826
; Publication No. US20030199466A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-II
; FILE REFERENCE: 37782002001

; CURRENT APPLICATION NUMBER: US/10/177,826
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 104
; LENGTH: 14
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-177-826-104

Query Match 100.0%; Score 10; DB 16; Length 14;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
Db 5 CGAACGTTTCG 14
|||||

RESULT 50
US-10-177-826-104/c
; Sequence 104, Application US/10177826
; Publication No. US20030199466A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE REFERENCE: 377882002001
; CURRENT APPLICATION NUMBER: US/10/177,826
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 104
; LENGTH: 14
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-177-826-104

Query Match 100.0%; Score 10; DB 16; Length 14;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
Db 14 CGAACGTTTCG 5
|||||

RESULT 51
US-10-328-578-98
; Sequence 98, Application US/10328578
; Publication No. US20030225016A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE REFERENCE: 377882002020
; CURRENT APPLICATION NUMBER: US/10/328,578

; CURRENT FILING DATE: 2003-05-16
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/375,253
; PRIOR FILING DATE: 2002-04-23
; PRIOR APPLICATION NUMBER: US 10/177,826
; NUMBER OF SEQ ID NOS: 152
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 98
; LENGTH: 14
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-328-578-98

Query Match 100.0%; Score 10; DB 17; Length 14;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
Db 5 CGAACGTTTCG 14
|||||

RESULT 52
US-10-328-578-98/c
; Sequence 98, Application US/10328578
; Publication No. US20030225016A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE REFERENCE: 377882002020
; CURRENT APPLICATION NUMBER: US/10/328,578
; CURRENT FILING DATE: 2003-05-16
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/375,253
; PRIOR FILING DATE: 2002-04-23
; PRIOR APPLICATION NUMBER: US 10/177,826
; NUMBER OF SEQ ID NOS: 152
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 98
; LENGTH: 14
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-328-578-98

Query Match 100.0%; Score 10; DB 17; Length 14;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
Db 14 CGAACGTTTCG 5
|||||

RESULT 53
US-10-623-371-98
; Sequence 98, Application US/10623371
; Publication No. US20040132677A1
; GENERAL INFORMATION:

; APPLICANT: FEARON, Karen L.
; APPLICANT: DINA, Dino
; APPLICANT: TUCK, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-IV
; FILE REFERENCE: 377882002021
; CURRENT APPLICATION NUMBER: US/10/623,371
; CURRENT FILING DATE: 2003-07-18
; PRIOR APPLICATION NUMBER: US 10/328,578
; PRIOR FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 10/177,826
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 158
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 98
; LENGTH: 14
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-623-371-98

Query Match 100.0%; Score 10; DB 19; Length 14;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
|||||
DB 5 CGAACGTTTCG 14

RESULT 54
US-10-623-371-98/c
; Sequence 98, Application US/10623371
; Publication No. US20040132677A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.
; APPLICANT: DINA, Dino
; APPLICANT: TUCK, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-IV
; FILE REFERENCE: 377882002021
; CURRENT APPLICATION NUMBER: US/10/623,371
; CURRENT FILING DATE: 2003-07-18
; PRIOR APPLICATION NUMBER: US 10/328,578
; PRIOR FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 10/177,826
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 158
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 98
; LENGTH: 14
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-623-371-98

Query Match 100.0%; Score 10; DB 19; Length 14;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
|||||
DB 14 CGAACGTTTCG 5

RESULT 55
US-10-739-518-98
; Sequence 98, Application US/10739518
; Publication No. US20040136948A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; TITLE OF INVENTION: BRANCHED IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME
; FILE REFERENCE: 377882003200
; CURRENT APPLICATION NUMBER: US/10/739,518
; CURRENT FILING DATE: 2003-12-17
; PRIOR APPLICATION NUMBER: US 60/436,406
; PRIOR FILING DATE: 2002-12-23
; NUMBER OF SEQ ID NOS: 148
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 98
; LENGTH: 14
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Construct
US-10-739-518-98

Query Match 100.0%; Score 10; DB 19; Length 14;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
|||||
DB 5 CGAACGTTTCG 14

RESULT 56
US-10-739-518-98/c
; Sequence 98, Application US/10739518
; Publication No. US20040136948A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; TITLE OF INVENTION: BRANCHED IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME
; FILE REFERENCE: 377882003200
; CURRENT APPLICATION NUMBER: US/10/739,518
; CURRENT FILING DATE: 2003-12-17
; PRIOR APPLICATION NUMBER: US 60/436,406
; PRIOR FILING DATE: 2002-12-23
; NUMBER OF SEQ ID NOS: 148
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 98
; LENGTH: 14
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Construct
US-10-739-518-98

Query Match 100.0%; Score 10; DB 19; Length 14;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
|||||
DB 14 CGAACGTTTCG 5

RESULT 57
US-10-739-518-104
; Sequence 104, Application US/10739518

; Publication No. US20040136948A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; TITLE OF INVENTION: BRANCHED IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME
; FILE REFERENCE: 377882003200
; CURRENT FILING DATE: 2003-12-17
; PRIOR APPLICATION NUMBER: US/10/739,518
; PRIOR FILING DATE: 2002-12-23
; NUMBER OF SEQ ID NOS: 148
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 104
; LENGTH: 14
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Construct
US-10-739-518-104.

Query Match 100.0%; Score 10; DB 19; Length 14;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
|||||
DB 5 CGAACGTTTCG 14

RESULT 58
US-10-739-518-104/c

; Sequence 104, Application US/10739518
; Publication No. US20040136948A1
; GENERAL INFORMATION:

; APPLICANT: Fearon, Karen L.
; TITLE OF INVENTION: BRANCHED IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME
; FILE REFERENCE: 377882003200
; CURRENT APPLICATION NUMBER: US/10/739,518
; CURRENT FILING DATE: 2003-12-17
; PRIOR APPLICATION NUMBER: US 60/436,406
; PRIOR FILING DATE: 2002-12-23
; NUMBER OF SEQ ID NOS: 148
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 104
; LENGTH: 14
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Construct
US-10-739-518-104

Query Match 100.0%; Score 10; DB 19; Length 14;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
|||||
DB 14 CGAACGTTTCG 5

RESULT 59

US-10-739-518-136
; Sequence 136, Application US/10739518
; Publication No. US20040136948A1
; GENERAL INFORMATION:

; APPLICANT: Fearon, Karen L.
; TITLE OF INVENTION: BRANCHED IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME
; FILE REFERENCE: 377882003200
; CURRENT APPLICATION NUMBER: US/10/739,518
; CURRENT FILING DATE: 2003-12-17
; PRIOR APPLICATION NUMBER: US 60/436,406

; PRIOR FILING DATE: 2002-12-23
; NUMBER OF SEQ ID NOS: 148
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 136
; LENGTH: 14
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Construct
US-10-739-518-136

Query Match 100.0%; Score 10; DB 19; Length 14;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
|||||
DB 4 CGAACGTTTCG 13

RESULT 60

US-10-739-518-136/c
; Sequence 136, Application US/10739518
; Publication No. US20040136948A1
; GENERAL INFORMATION:

; APPLICANT: Fearon, Karen L.
; TITLE OF INVENTION: BRANCHED IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME
; FILE REFERENCE: 377882003200
; CURRENT APPLICATION NUMBER: US/10/739,518
; CURRENT FILING DATE: 2003-12-17
; PRIOR APPLICATION NUMBER: US 60/436,406
; PRIOR FILING DATE: 2002-12-23
; NUMBER OF SEQ ID NOS: 148
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 136
; LENGTH: 14
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Construct
US-10-739-518-136

Query Match 100.0%; Score 10; DB 19; Length 14;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
|||||
DB 13 CGAACGTTTCG 4

RESULT 61

US-10-033-243-11
; Sequence 11, Application US/10033243
; Publication No. US20030049266A1
; GENERAL INFORMATION:

; APPLICANT: Fearon, Karen L.
; APPLICANT: DINA, Dino
; TITLE OF INVENTION: IMMUNOMODULATORY POLYNUCLEOTIDES AND
; TITLE OF INVENTION: METHODS OF USING THE SAME
; FILE REFERENCE: 377882001800
; CURRENT APPLICATION NUMBER: US/10/033,243
; CURRENT FILING DATE: 2002-04-03
; PRIOR APPLICATION NUMBER: 60/258,675
; PRIOR FILING DATE: 2000-12-27
; NUMBER OF SEQ ID NOS: 133
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 11
; LENGTH: 16
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:

; OTHER INFORMATION: Polynucleotide containing CG
US-10-033-243-11

Query Match 100.0%; Score 10; DB 14; Length 16;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
DB 5 CGAACGTTTCG 14

RESULT 62

US-10-033-243-11/c
; Sequence 11, Application US/10033243
; Publication No. US20030049266A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; APPLICANT: Dina, Dino
; TITLE OF INVENTION: IMMUNOMODULATORY POLYNUCLEOTIDES AND
; TITLE OF INVENTION: METHODS OF USING THE SAME
; FILE REFERENCE: 377882001800
; CURRENT APPLICATION NUMBER: US/10/033,243
; CURRENT FILING DATE: 2002-04-03
; PRIOR APPLICATION NUMBER: 60/259,675
; PRIOR FILING DATE: 2000-12-27
; NUMBER OF SEQ ID NOS: 133
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 11
; LENGTH: 16
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Polynucleotide containing CG
US-10-033-243-11

Query Match 100.0%; Score 10; DB 14; Length 16;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
DB 14 CGAACGTTTCG 5

RESULT 63

US-10-176-883-33
; Sequence 33, Application US/10176883
; Publication No. US20030175731A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-I
; FILE REFERENCE: 377882002000
; CURRENT APPLICATION NUMBER: US/10/176,883
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 33
; LENGTH: 16
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-176-883-33

Query Match 100.0%; Score 10; DB 16; Length 16;

Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
DB 5 CGAACGTTTCG 14

RESULT 64

US-10-176-883-33/c
; Sequence 33, Application US/10176883
; Publication No. US20030175731A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-I
; FILE REFERENCE: 377882002000
; CURRENT APPLICATION NUMBER: US/10/176,883
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 33
; LENGTH: 16
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-176-883-33

Query Match 100.0%; Score 10; DB 16; Length 16;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
DB 14 CGAACGTTTCG 5

RESULT 65

US-10-177-826-33
; Sequence 33, Application US/10177826
; Publication No. US20030199466A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-II
; FILE REFERENCE: 377882002001
; CURRENT APPLICATION NUMBER: US/10/177,826
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 33
; LENGTH: 16
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-177-826-33

Query Match 100.0%; Score 10; DB 16; Length 16;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;

Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
Db 5 CGAACGTTTCG 14

RESULT 66

US-10-177-826-33/c
; Sequence 33, Application US/10177826
; Publication No. US20030199466A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE REFERENCE: 377882002001
; CURRENT FILING DATE: 2002-06-21
; PRIOR FILING DATE: 2002-06-21
; PRIOR FILING DATE: 2001-06-21
; PRIOR FILING DATE: 2001-06-21
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 33
; LENGTH: 16
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-177-826-33

Query Match 100.0%; Score 10; DB 16; Length 16;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
Db 14 CGAACGTTTCG 5

RESULT 67

US-10-328-578-33
; Sequence 33, Application US/10328578
; Publication No. US20030225016A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE REFERENCE: 377882002020
; CURRENT FILING DATE: 2003-05-16
; PRIOR FILING DATE: 2002-06-21
; PRIOR FILING DATE: 2002-06-21
; PRIOR FILING DATE: 2001-06-21
; PRIOR FILING DATE: 2001-06-21
; PRIOR FILING DATE: 2002-04-23
; PRIOR FILING DATE: 2002-06-21
; PRIOR FILING DATE: 2002-06-21
; NUMBER OF SEQ ID NOS: 152
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 33
; LENGTH: 16
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-328-578-33

Query Match 100.0%; Score 10; DB 17; Length 16;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
Db 5 CGAACGTTTCG 14

RESULT 68

US-10-328-578-33/c
; Sequence 33, Application US/10328578
; Publication No. US20030225016A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE REFERENCE: 377882002020
; CURRENT FILING DATE: 2003-05-16
; PRIOR FILING DATE: 2002-06-21
; PRIOR FILING DATE: 2002-06-21
; PRIOR FILING DATE: 2001-06-21
; PRIOR FILING DATE: 2001-06-21
; PRIOR FILING DATE: 2002-04-23
; PRIOR FILING DATE: 2002-06-21
; NUMBER OF SEQ ID NOS: 152
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 33
; LENGTH: 16
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-328-578-33

Query Match 100.0%; Score 10; DB 17; Length 16;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
Db 14 CGAACGTTTCG 5

RESULT 69

US-10-623-371-33
; Sequence 33, Application US/10623371
; Publication No. US20040132677A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE REFERENCE: 377882002021
; CURRENT FILING DATE: 2003-07-18
; PRIOR FILING DATE: 2002-12-23
; PRIOR FILING DATE: 2002-12-23
; PRIOR FILING DATE: 2002-06-21
; PRIOR FILING DATE: 2002-06-21
; PRIOR FILING DATE: 2002-06-21
; PRIOR FILING DATE: 2001-06-21
; PRIOR FILING DATE: 2001-06-21
; PRIOR FILING DATE: 2002-04-23

; NUMBER OF SEQ ID NOS: 158
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 33
; LENGTH: 16
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-623-371-33

Query Match 100.0%; Score 10; DB 19; Length 16;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
|||
Db 5 CGAACGTTTCG 14

RESULT 70

US-10-623-371-33/c
; Sequence 33, Application US/10623371
; Publication No. US20040132677A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.
; APPLICANT: DINA, Dino
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-IV
; FILE REFERENCE: 377882002021
; CURRENT APPLICATION NUMBER: US/10/623,371
; CURRENT FILING DATE: 2003-07-18
; PRIOR APPLICATION NUMBER: US 10/328,578
; PRIOR FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 10/177,826
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 158
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 33
; LENGTH: 16
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-623-371-33

Query Match 100.0%; Score 10; DB 19; Length 16;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
|||
Db 14 CGAACGTTTCG 5

RESULT 71

US-10-739-518-33
; Sequence 33, Application US/10739518
; Publication No. US20040136948A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.
; TITLE OF INVENTION: BRANCHED IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME
; FILE REFERENCE: 377882003200
; CURRENT APPLICATION NUMBER: US/10/739,518
; CURRENT FILING DATE: 2003-12-17
; PRIOR APPLICATION NUMBER: US 60/436,406

; PRIOR FILING DATE: 2002-12-23
; NUMBER OF SEQ ID NOS: 148
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 33
; LENGTH: 16
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Construct
US-10-739-518-33

Query Match 100.0%; Score 10; DB 19; Length 16;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
|||
Db 5 CGAACGTTTCG 14

RESULT 72

US-10-739-518-33/c
; Sequence 33, Application US/10739518
; Publication No. US20040136948A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.
; TITLE OF INVENTION: BRANCHED IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME
; FILE REFERENCE: 377882003200
; CURRENT APPLICATION NUMBER: US/10/739,518
; CURRENT FILING DATE: 2003-12-17
; PRIOR APPLICATION NUMBER: US 60/436,406
; PRIOR FILING DATE: 2002-12-23
; NUMBER OF SEQ ID NOS: 148
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 33
; LENGTH: 16
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Construct
US-10-739-518-33

Query Match 100.0%; Score 10; DB 19; Length 16;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
|||
Db 14 CGAACGTTTCG 5

RESULT 73

US-10-623-371-156
; Sequence 156, Application US/10623371
; Publication No. US20040132677A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.
; APPLICANT: DINA, Dino
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-IV
; FILE REFERENCE: 377882002021
; CURRENT APPLICATION NUMBER: US/10/623,371
; CURRENT FILING DATE: 2003-07-18
; PRIOR APPLICATION NUMBER: US 10/328,578
; PRIOR FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 10/177,826
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21

; PRIOR APPLICATION NUMBER: US 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 158
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 156
; LENGTH: 17
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Construct
US-10-623-371-156

Query Match 100.0%; Score 10; DB 19; Length 17;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
|||||
Db 6 CGAACGTTTCG 15

RESULT 74

US-10-623-371-156/c
; Sequence 156, Application US/10623371
; Publication No. US20040132677A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.
; APPLICANT: DINA, Dina
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-IV
; FILE REFERENCE: 377882002021
; CURRENT APPLICATION NUMBER: US/10/623,371
; CURRENT FILING DATE: 2003-07-18
; PRIOR APPLICATION NUMBER: US 10/328,578
; PRIOR FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 10/177,826
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 158
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 156
; LENGTH: 17
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Construct
US-10-623-371-156

Query Match 100.0%; Score 10; DB 19; Length 17;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
|||||
Db 15 CGAACGTTTCG 6

RESULT 75

US-10-033-243-14
; Sequence 14, Application US/10033243
; Publication No. US20030049266A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.
; APPLICANT: DINA, Dina
; TITLE OF INVENTION: IMMUNOMODULATORY POLYNUCLEOTIDES AND
; TITLE OF INVENTION: METHODS OF USING THE SAME
; FILE REFERENCE: 377882001800

; CURRENT APPLICATION NUMBER: US/10/033,243
; CURRENT FILING DATE: 2002-04-03
; PRIOR APPLICATION NUMBER: 60/258,675
; PRIOR FILING DATE: 2000-12-27
; NUMBER OF SEQ ID NOS: 133
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 14
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Polynucleotide containing CG
US-10-033-243-14

Query Match 100.0%; Score 10; DB 14; Length 18;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
|||||
Db 4 CGAACGTTTCG 13

RESULT 76

US-10-033-243-14/c
; Sequence 14, Application US/10033243
; Publication No. US20030049266A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.
; APPLICANT: DINA, Dina
; TITLE OF INVENTION: IMMUNOMODULATORY POLYNUCLEOTIDES AND
; TITLE OF INVENTION: METHODS OF USING THE SAME
; FILE REFERENCE: 377882001800
; CURRENT APPLICATION NUMBER: US/10/033,243
; CURRENT FILING DATE: 2002-04-03
; PRIOR APPLICATION NUMBER: 60/258,675
; PRIOR FILING DATE: 2000-12-27
; NUMBER OF SEQ ID NOS: 133
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 14
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Polynucleotide containing CG
US-10-033-243-14

Query Match 100.0%; Score 10; DB 14; Length 18;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
|||||
Db 13 CGAACGTTTCG 4

RESULT 77

US-10-176-883-36
; Sequence 36, Application US/10176883
; Publication No. US20030175731A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dina
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-I
; FILE REFERENCE: 377882002000
; CURRENT APPLICATION NUMBER: US/10/176,883
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23

```
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 36
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-176-883-36

Query Match      100.0%; Score 10; DB 16; Length 18;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 4 CGAACGTTTCG 13

RESULT 78
US-10-176-883-36/c
; Sequence 36, Application US/10176883
; Publication No. US20030175731A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-I
; FILE REFERENCE: 37782002000
; CURRENT APPLICATION NUMBER: US/10/176,883
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 36
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-176-883-36

Query Match      100.0%; Score 10; DB 16; Length 18;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 13 CGAACGTTTCG 4

RESULT 79
US-10-177-826-36
; Sequence 36, Application US/10177826
; Publication No. US20030199466A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-II
; FILE REFERENCE: 37782002001
; CURRENT APPLICATION NUMBER: US/10/177,826
; CURRENT FILING DATE: 2002-05-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 36
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-177-826-36

Query Match      100.0%; Score 10; DB 16; Length 18;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 13 CGAACGTTTCG 4

RESULT 80
US-10-177-826-36/c
; Sequence 36, Application US/10177826
; Publication No. US20030199466A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-II
; FILE REFERENCE: 37782002001
; CURRENT APPLICATION NUMBER: US/10/177,826
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 36
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-177-826-36

Query Match      100.0%; Score 10; DB 16; Length 18;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 13 CGAACGTTTCG 4

RESULT 81
US-10-328-578-36
; Sequence 36, Application US/10328578
; Publication No. US20030225016A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; APPLICANT: Dina, Dino
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-III
; FILE REFERENCE: 37782002020
; CURRENT APPLICATION NUMBER: US/10/328,578
; CURRENT FILING DATE: 2003-05-16
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/375,253
; PRIOR FILING DATE: 2002-04-23
```

```
; PRIOR APPLICATION NUMBER: US 10/177,826
; PRIOR FILING DATE: 2002-06-21
; NUMBER OF SEQ ID NOS: 152
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 36
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-328-578-36

Query Match      100.0%; Score 10; DB 17; Length 18;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
Db 4 CGAACGTTTCG 13

RESULT 82
US-10-328-578-36/c
; Sequence 36, Application US/10328578
; Publication No. US20030225016A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-III
; FILE REFERENCE: 377882002020
; CURRENT APPLICATION NUMBER: US/10/328,578
; CURRENT FILING DATE: 2003-05-16
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/375,253
; PRIOR FILING DATE: 2002-04-23
; PRIOR APPLICATION NUMBER: US 10/177,826
; NUMBER OF SEQ ID NOS: 152
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 36
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-328-578-36

Query Match      100.0%; Score 10; DB 17; Length 18;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
Db 13 CGAACGTTTCG 4

RESULT 83
US-10-623-371-36
; Sequence 36, Application US/10623371
; Publication No. US20040132677A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; APPLICANT: Tuck, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-IV
; FILE REFERENCE: 377882002021
; CURRENT APPLICATION NUMBER: US/10/623,371
```

```
; CURRENT FILING DATE: 2003-07-18
; PRIOR APPLICATION NUMBER: US 10/328,578
; PRIOR FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 10/177,826
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 158
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 36
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-623-371-36

Query Match      100.0%; Score 10; DB 19; Length 18;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
Db 4 CGAACGTTTCG 13

RESULT 84
US-10-623-371-36/c
; Sequence 36, Application US/10623371
; Publication No. US20040132677A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-IV
; FILE REFERENCE: 377882002021
; CURRENT APPLICATION NUMBER: US/10/623,371
; CURRENT FILING DATE: 2003-07-18
; PRIOR APPLICATION NUMBER: US 10/328,578
; PRIOR FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 10/177,826
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 158
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 36
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-623-371-36

Query Match      100.0%; Score 10; DB 19; Length 18;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
Db 13 CGAACGTTTCG 4

RESULT 85
US-10-623-371-36
```

US-10-739-518-36
; Sequence 36, Application US/10739518
; Publication No. US20040136948A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; TITLE OF INVENTION: BRANCHED IMMUNOMODULATORY COMPOUNDS AND
; FILE REFERENCE: 37782003200
; CURRENT APPLICATION NUMBER: US/10/739,518
; CURRENT FILING DATE: 2003-12-17
; PRIOR APPLICATION NUMBER: US 60/436,406
; PRIOR FILING DATE: 2002-12-23
; NUMBER OF SEQ ID NOS: 148
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 36
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Construct
US-10-739-518-36

Query Match 100.0%; Score 10; DB 19; Length 18;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 4 CGAACGTTTCG 13

RESULT 86
US-10-739-518-36/c
; Sequence 36, Application US/10739518
; Publication No. US20040136948A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; TITLE OF INVENTION: BRANCHED IMMUNOMODULATORY COMPOUNDS AND
; FILE REFERENCE: 37782003200
; CURRENT APPLICATION NUMBER: US/10/739,518
; CURRENT FILING DATE: 2003-12-17
; PRIOR APPLICATION NUMBER: US 60/436,406
; PRIOR FILING DATE: 2002-12-23
; NUMBER OF SEQ ID NOS: 148
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 36
; LENGTH: 18
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Construct
US-10-739-518-36

Query Match 100.0%; Score 10; DB 19; Length 18;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 13 CGAACGTTTCG 4

RESULT 87
US-09-927-422A-16
; Sequence 16, Application US/09927422A
; Publication No. US20030022852A1
; GENERAL INFORMATION:
; APPLICANT: Van Nest, Gary
; APPLICANT: Tuck, Stephen
; APPLICANT: Fearon, Karen L.
; APPLICANT: Dina, Dino
; TITLE OF INVENTION: BIODEGRADABLE IMMUNOMODULATORY

; TITLE OF INVENTION: FORMULATIONS AND METHODS FOR USE THEREOF
; FILE REFERENCE: 37782001420
; CURRENT APPLICATION NUMBER: US/09/927,422A
; CURRENT FILING DATE: 2001-08-10
; PRIOR APPLICATION NUMBER: U.S. 09/802,359
; PRIOR FILING DATE: 2001-03-09
; PRIOR APPLICATION NUMBER: U.S. 60/188,30
; PRIOR FILING DATE: 2000-03-10
; NUMBER OF SEQ ID NOS: 23
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 16
; LENGTH: 19
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Polynucleotide containing CG
US-09-927-422A-16

Query Match 100.0%; Score 10; DB 10; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 5 CGAACGTTTCG 14

RESULT 88
US-09-927-422A-16/c
; Sequence 16, Application US/09927422A
; Publication No. US20030022852A1
; GENERAL INFORMATION:
; APPLICANT: Van Nest, Gary
; APPLICANT: Tuck, Stephen
; APPLICANT: Fearon, Karen L.
; APPLICANT: Dina, Dino
; TITLE OF INVENTION: BIODEGRADABLE IMMUNOMODULATORY
; FILE REFERENCE: 37782001420
; CURRENT APPLICATION NUMBER: US/09/927,422A
; CURRENT FILING DATE: 2001-08-10
; PRIOR APPLICATION NUMBER: U.S. 09/802,359
; PRIOR FILING DATE: 2001-03-09
; PRIOR APPLICATION NUMBER: U.S. 60/188,30
; PRIOR FILING DATE: 2000-03-10
; NUMBER OF SEQ ID NOS: 23
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 16
; LENGTH: 19
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Polynucleotide containing CG
US-09-927-422A-16

Query Match 100.0%; Score 10; DB 10; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 14 CGAACGTTTCG 5

RESULT 89
US-10-033-243-19
; Sequence 19, Application US/10033243
; Publication No. US20030049266A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; APPLICANT: Tuck, Stephen
; APPLICANT: Dina, Dino
; TITLE OF INVENTION: IMMUNOMODULATORY POLYNUCLEOTIDES AND
; TITLE OF INVENTION: METHODS OF USING THE SAME

```
; FILE REFERENCE: 377882001800
; CURRENT APPLICATION NUMBER: US/10/033,243
; PRIOR FILING DATE: 2002-04-03
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 19
; LENGTH: 19
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Polynucleotide containing CG
US-10-033-243-19

Query Match      100.0%; Score 10; DB 14; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 5 CGAACGTTTCG 14

RESULT 90
US-10-033-243-19/c
; Sequence 19, Application US/10033243
; Publication No. US20030049266A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.
; APPLICANT: DINA, Dino
; TITLE OF INVENTION: IMMUNOMODULATORY POLYNUCLEOTIDES AND
; TITLE OF INVENTION: METHODS OF USING THE SAME
; FILE REFERENCE: 377882001800
; CURRENT APPLICATION NUMBER: US/10/033,243
; PRIOR FILING DATE: 2002-04-03
; PRIOR APPLICATION NUMBER: 60/258,675
; PRIOR FILING DATE: 2000-12-27
; NUMBER OF SEQ ID NOS: 133
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 19
; LENGTH: 19
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Polynucleotide containing CG
US-10-033-243-19

Query Match      100.0%; Score 10; DB 14; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 5 CGAACGTTTCG 14

RESULT 91
US-10-176-883-41
; Sequence 41, Application US/10176883
; Publication No. US20030175731A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-I
; FILE REFERENCE: 377882002000
; CURRENT APPLICATION NUMBER: US/10/176,883
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
```

```
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 41
; LENGTH: 19
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-176-883-41

Query Match      100.0%; Score 10; DB 16; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 5 CGAACGTTTCG 14

RESULT 92
US-10-176-883-41/c
; Sequence 41, Application US/10176883
; Publication No. US20030175731A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-I
; FILE REFERENCE: 377882002000
; CURRENT APPLICATION NUMBER: US/10/176,883
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 41
; LENGTH: 19
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-176-883-41

Query Match      100.0%; Score 10; DB 16; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 14 CGAACGTTTCG 5

RESULT 93
US-10-177-826-41
; Sequence 41, Application US/10177826
; Publication No. US20030199466A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen
; APPLICANT: Dina, Dino
; APPLICANT: Tuck, Stephen
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-II
; FILE REFERENCE: 377882002001
; CURRENT APPLICATION NUMBER: US/10/177,826
; CURRENT FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
```

; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 41
; LENGTH: 19
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-177-826-41

Query Match 100.0%; Score 10; DB 16; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
Db 5 CGAACGTTTCG 14
|||||

RESULT 94

US-10-177-826-41/c
; Sequence 41, Application US/10177826
; Publication No. US20030199466A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; APPLICANT: Tuck, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE REFERENCE: 37782002001
; CURRENT APPLICATION NUMBER: US/10/177,826
; CURRENT FILING DATE: 2002-06-21
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 141
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 41
; LENGTH: 19
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-177-826-41

Query Match 100.0%; Score 10; DB 16; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
Db 14 CGAACGTTTCG 5
|||||

RESULT 95

US-10-328-578-41
; Sequence 41, Application US/10328578
; Publication No. US20030225016A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; APPLICANT: Tuck, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE REFERENCE: 37782002020
; CURRENT APPLICATION NUMBER: US/10/328,578
; CURRENT FILING DATE: 2003-05-16
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/375,253

; PRIOR FILING DATE: 2002-04-23
; PRIOR APPLICATION NUMBER: US 10/177,826
; PRIOR FILING DATE: 2002-06-21
; NUMBER OF SEQ ID NOS: 152
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 41
; LENGTH: 19
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-328-578-41

Query Match 100.0%; Score 10; DB 17; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
Db 5 CGAACGTTTCG 14
|||||

RESULT 96

US-10-328-578-41/c
; Sequence 41, Application US/10328578
; Publication No. US20030225016A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; APPLICANT: Tuck, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE REFERENCE: 37782002020
; CURRENT APPLICATION NUMBER: US/10/328,578
; CURRENT FILING DATE: 2003-05-16
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/375,253
; PRIOR FILING DATE: 2002-04-23
; PRIOR APPLICATION NUMBER: US 10/177,826
; NUMBER OF SEQ ID NOS: 152
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 41
; LENGTH: 19
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-328-578-41

Query Match 100.0%; Score 10; DB 17; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
Db 14 CGAACGTTTCG 5
|||||

RESULT 97

US-10-623-371-41
; Sequence 41, Application US/10623371
; Publication No. US20040132677A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; APPLICANT: Tuck, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; FILE REFERENCE: 37782002021

```
; CURRENT APPLICATION NUMBER: US/10/623,371
; CURRENT FILING DATE: 2003-07-18
; PRIOR APPLICATION NUMBER: US 10/328,578
; PRIOR FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 10/177,826
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 158
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 41
; LENGTH: 19
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-623-371-41
```

```
Query Match 100.0%; Score 10; DB 19; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy 1 CGAACGTTTCG 10
Db 5 CGAACGTTTCG 14
|||||
```

RESULT 98

```
US-10-623-371-41/c
; Sequence 41, Application US/10623371
; Publication No. US20040132677A1
; GENERAL INFORMATION:
; APPLICANT: FEARON, Karen L.
; APPLICANT: DINA, Dino
; APPLICANT: TUCK, Stephen F.
; TITLE OF INVENTION: CHIMERIC IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME-IV
; FILE REFERENCE: 377882002021
; CURRENT APPLICATION NUMBER: US/10/623,371
; CURRENT FILING DATE: 2003-07-18
; PRIOR APPLICATION NUMBER: US 10/328,578
; PRIOR FILING DATE: 2002-12-23
; PRIOR APPLICATION NUMBER: US 10/176,883
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 10/177,826
; PRIOR FILING DATE: 2002-06-21
; PRIOR APPLICATION NUMBER: US 60/299,883
; PRIOR FILING DATE: 2001-06-21
; PRIOR APPLICATION NUMBER: US 60/375,253
; PRIOR FILING DATE: 2002-04-23
; NUMBER OF SEQ ID NOS: 158
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 41
; LENGTH: 19
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic construct
US-10-623-371-41
```

```
Query Match 100.0%; Score 10; DB 19; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy 1 CGAACGTTTCG 10
Db 14 CGAACGTTTCG 5
|||||
```

RESULT 99

```
US-10-739-518-41
; Sequence 41, Application US/10739518
; Publication No. US20040136948A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; TITLE OF INVENTION: BRANCHED IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME
; FILE REFERENCE: 377882003200
; CURRENT APPLICATION NUMBER: US/10/739,518
; CURRENT FILING DATE: 2003-12-17
; PRIOR APPLICATION NUMBER: US 60/436,406
; PRIOR FILING DATE: 2002-12-23
; NUMBER OF SEQ ID NOS: 148
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 41
; LENGTH: 19
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Construct
US-10-739-518-41
```

```
Query Match 100.0%; Score 10; DB 19; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy 1 CGAACGTTTCG 10
Db 5 CGAACGTTTCG 14
|||||
```

RESULT 100

```
US-10-739-518-41/c
; Sequence 41, Application US/10739518
; Publication No. US20040136948A1
; GENERAL INFORMATION:
; APPLICANT: Fearon, Karen L.
; TITLE OF INVENTION: BRANCHED IMMUNOMODULATORY COMPOUNDS AND
; TITLE OF INVENTION: METHODS OF USING THE SAME
; FILE REFERENCE: 377882003200
; CURRENT APPLICATION NUMBER: US/10/739,518
; CURRENT FILING DATE: 2003-12-17
; PRIOR APPLICATION NUMBER: US 60/436,406
; PRIOR FILING DATE: 2002-12-23
; NUMBER OF SEQ ID NOS: 148
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 41
; LENGTH: 19
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Synthetic Construct
US-10-739-518-41
```

```
Query Match 100.0%; Score 10; DB 19; Length 19;
Best Local Similarity 100.0%; Pred. No. 7.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
```

```
Qy 1 CGAACGTTTCG 10
Db 14 CGAACGTTTCG 5
|||||
```

```
Search completed: June 30, 2005, 03:50:47
Job time : 289.5 secs
```

GenCore version 5.1.6
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OM nucleic - nucleic search, using sw model

Run on: June 29, 2005, 23:58:44 ; Search time 70.5 Seconds
(without alignments)
232.096 Million cell updates/sec

Title: US-10-033-243-77

Perfect score: 10

Sequence: 1 cgaacttgcg 10

Scoring table: IDENTITY NUC

Gapop 10.0 , Gapext 1.0

Searched: 1202784 seqs, 818138359 residues

Total number of hits satisfying chosen parameters: 2405568

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 100 summaries

Database :

Issued Patents NA.*
1: /cgn2_6/ptodata/1/ina/5A COMB.seq.*
2: /cgn2_6/ptodata/1/ina/5B COMB.seq.*
3: /cgn2_6/ptodata/1/ina/6A COMB.seq.*
4: /cgn2_6/ptodata/1/ina/6B COMB.seq.*
5: /cgn2_6/ptodata/1/ina/PTUS COMB.seq.*
6: /cgn2_6/ptodata/1/ina/backfiles1.seq.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	10	100.0	22	2	US-08-882-704A-18
2	10	100.0	22	2	US-08-882-704A-18
3	10	100.0	22	3	US-09-151-957-18
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9	10	100.0	71	3	US-08-633-768A-12
10	10	100.0	71	3	US-08-633-768A-12
11	10	100.0	71	4	US-09-280-197-22
12	10	100.0	71	4	US-09-280-197-22
13	10	100.0	77	1	US-08-399-412A-58
14	10	100.0	77	1	US-08-399-412A-58
15	10	100.0	89	4	US-09-270-767-31109
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22	10	100.0	284	4	US-09-313-294A-5372
23	10	100.0	288	4	US-09-252-991A-69
24	10	100.0	288	4	US-09-252-991A-69
25	10	100.0	299	4	US-09-902-540-1757
26	10	100.0	299	4	US-09-902-540-1757
27	10	100.0	321	3	US-09-240-274-197

10	100.0	321	3	US-09-240-274-197	Sequence 137, Appl
10	100.0	339	4	US-09-627-896B-26	Sequence 26, Appl
10	100.0	339	4	US-09-627-896B-26	Sequence 26, Appl
10	100.0	372	4	US-09-328-352-1	Sequence 1, Appl
10	100.0	372	4	US-09-328-352-1	Sequence 1, Appl
10	100.0	378	4	US-09-252-991A-5359	Sequence 5359, Ap
10	100.0	378	4	US-09-252-991A-5359	Sequence 5359, Ap
10	100.0	390	2	US-08-882-704A-3	Sequence 3, Appl
10	100.0	390	2	US-08-882-704A-3	Sequence 3, Appl
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10	100.0	390	4	US-09-513-999C-1579	Sequence 1579, Ap
10	100.0	406	3	US-09-060-756-563	Sequence 563, App
10	100.0	406	3	US-09-060-756-563	Sequence 563, App
10	100.0	406	4	US-09-670-314-563	Sequence 563, App
10	100.0	406	4	US-09-670-314-563	Sequence 563, App
10	100.0	480	4	US-09-107-433-1794	Sequence 1794, Ap
10	100.0	480	4	US-09-107-433-1794	Sequence 1794, Ap
10	100.0	508	4	US-09-270-767-30406	Sequence 30406, A
10	100.0	508	4	US-09-270-767-30406	Sequence 30406, A
10	100.0	521	4	US-09-949-016-3503	Sequence 3503, Ap
10	100.0	521	4	US-09-949-016-3503	Sequence 3503, Ap
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10	100.0	553	4	US-09-551-621-152	Sequence 152, App
10	100.0	553	4	US-09-551-621-152	Sequence 152, App
10	100.0	581	4	US-09-621-976-3556	Sequence 3556, Ap
10	100.0	581	4	US-09-621-976-3556	Sequence 3556, Ap
10	100.0	581	4	US-09-270-767-26201	Sequence 26201, A
10	100.0	581	4	US-09-270-767-26201	Sequence 26201, A
10	100.0	582	4	US-09-252-991A-12907	Sequence 12907, A
10	100.0	582	4	US-09-252-991A-12907	Sequence 12907, A
10	100.0	597	4	US-09-489-039A-1408	Sequence 1408, Ap
10	100.0	597	4	US-09-489-039A-1408	Sequence 1408, Ap
10	100.0	603	4	US-09-489-039A-4244	Sequence 4244, Ap
10	100.0	603	4	US-09-489-039A-4244	Sequence 4244, Ap
10	100.0	664	4	US-09-621-976-3555	Sequence 3555, Ap
10	100.0	664	4	US-09-621-976-3555	Sequence 3555, Ap
10	100.0	729	4	US-09-270-767-14856	Sequence 14856, A
10	100.0	729	4	US-09-270-767-14856	Sequence 14856, A
10	100.0	737	3	US-08-469-260A-22	Sequence 22, Appl
10	100.0	737	3	US-08-469-260A-22	Sequence 22, Appl
10	100.0	737	3	US-08-488-446-22	Sequence 22, Appl
10	100.0	737	4	US-08-488-446-22	Sequence 22, Appl
10	100.0	737	4	US-08-467-344A-22	Sequence 22, Appl
10	100.0	737	4	US-08-467-344A-22	Sequence 22, Appl
10	100.0	737	4	US-08-424-550B-22	Sequence 22, Appl
10	100.0	737	4	US-08-424-550B-22	Sequence 22, Appl
10	100.0	813	4	US-09-107-532A-1566	Sequence 1566, Ap
10	100.0	813	4	US-09-107-532A-1566	Sequence 1566, Ap
10	100.0	816	3	US-08-776-251-10	Sequence 10, Appl
10	100.0	816	3	US-08-776-251-10	Sequence 10, Appl
10	100.0	856	3	US-08-998-416-537	Sequence 537, App
10	100.0	856	3	US-08-998-416-537	Sequence 537, App
10	100.0	964	4	US-09-270-767-10741	Sequence 10741, A
10	100.0	964	4	US-09-270-767-10741	Sequence 10741, A

ALIGNMENTS

RESULT 1
US-08-882-704A-18
; Sequence 18, Application US/08882704A
; Patent No. 5879906
; GENERAL INFORMATION:
; APPLICANT: Jefferson, Richard A.
; APPLICANT: Wilson, Katherine J.
; APPLICANT: Leader, Michael
; TITLE OF INVENTION: GLUCURONIDE REPRESSORS AND USES THEREOF
; NUMBER OF SEQUENCES: 19
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: SEED and BERRY LLP
; STREET: 6300 Columbia Center, 701 Fifth Avenue
; CITY: Seattle
; STATE: Washington
; COUNTRY: USA
; ZIP: 98104-7092
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/882,704A
; FILING DATE: 25-JUN-1997
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: No. 5879906tenburg Ph.D., Carol
; REGISTRATION NUMBER: 39,317
; REFERENCE/DOCKET NUMBER: 190106.404
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (206) 622-4900
; TELEFAX: (206) 682-6031
; INFORMATION FOR SEQ ID NO: 18:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 22 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; US-08-882-704A-18
; Query Match 100.0%; Score 10; DB 2; Length 22;
; Best Local Similarity 100.0%; Pred. No. 1.2e+03;
; Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
; Qy 1 CGAACGTTTCG 10
; Db 9 CGAACGTTTCG 18
; RESULT 2
US-08-882-704A-18/c
; Sequence 18, Application US/08882704A
; Patent No. 5879906
; GENERAL INFORMATION:
; APPLICANT: Jefferson, Richard A.
; APPLICANT: Wilson, Katherine J.
; APPLICANT: Leader, Michael
; TITLE OF INVENTION: GLUCURONIDE REPRESSORS AND USES THEREOF
; NUMBER OF SEQUENCES: 19
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: SEED and BERRY LLP
; STREET: 6300 Columbia Center, 701 Fifth Avenue
; CITY: Seattle
; STATE: Washington
; COUNTRY: USA
; ZIP: 98104-7092
; COMPUTER READABLE FORM:

; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/882,704A
; FILING DATE: 25-JUN-1997
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: No. 5879906tenburg Ph.D., Carol
; REGISTRATION NUMBER: 39,317
; REFERENCE/DOCKET NUMBER: 190106.404
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (206) 622-4900
; TELEFAX: (206) 682-6031
; INFORMATION FOR SEQ ID NO: 18:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 22 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; US-08-882-704A-18
; Query Match 100.0%; Score 10; DB 2; Length 22;
; Best Local Similarity 100.0%; Pred. No. 1.2e+03;
; Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
; Qy 1 CGAACGTTTCG 10
; Db 18 CGAACGTTTCG 9
; RESULT 3
US-09-151-957-18
; Sequence 18, Application US/09151957
; Patent No. 6429292
; GENERAL INFORMATION:
; APPLICANT: Jefferson, Richard A.
; APPLICANT: Wilson, Katherine J.
; APPLICANT: Leader, Michael
; TITLE OF INVENTION: GLUCURONIDE REPRESSORS AND USES THEREOF
; NUMBER OF SEQUENCES: 19
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: SEED and BERRY LLP
; STREET: 6300 Columbia Center, 701 Fifth Avenue
; CITY: Seattle
; STATE: Washington
; COUNTRY: USA
; ZIP: 98104-7092
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/151,957
; FILING DATE: 11-Sep-1998
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/882,704
; FILING DATE: <Unknown>
; ATTORNEY/AGENT INFORMATION:
; NAME: No. 6429292tenburg Ph.D., Carol
; REGISTRATION NUMBER: 39,317
; REFERENCE/DOCKET NUMBER: 190106.404
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (206) 622-4900
; TELEFAX: (206) 682-6031
; INFORMATION FOR SEQ ID NO: 18:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 22 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single

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;
; TOPOLOGY: linear
; SEQUENCE DESCRIPTION: SEQ ID NO: 18:
US-09-151-957-18
Query Match 100.0%; Score 10; DB 3; Length 22;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 9 CGAACGTTTCG 18

RESULT 4
US-09-151-957-18/c
; Sequence 18, Application US/09151957
; Patent No. 6429292
; GENERAL INFORMATION:
; APPLICANT: Jefferson, Richard A.
; APPLICANT: Leader, Michael
; TITLE OF INVENTION: GLUCURONIDE REPRESSORS AND USES THEREOF
; NUMBER OF SEQUENCES: 19
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: SEED and BERRY LLP
; STREET: 6300 Columbia Center, 701 Fifth Avenue
; CITY: Seattle
; STATE: Washington
; COUNTRY: USA
; ZIP: 98104-7092
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: IBM PC compatible
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/882,704A
; FILING DATE: 25-JUN-1997
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: No. 5879906tenburg Ph.D., Carol
; REGISTRATION NUMBER: 39,317
; REFERENCE/DOCKET NUMBER: 190106.404
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (206) 622-4900
; TELEFAX: (206) 682-6031
; INFORMATION FOR SEQ ID NO: 16:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 48 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
US-08-882-704A-16
Query Match 100.0%; Score 10; DB 2; Length 48;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 25 CGAACGTTTCG 34

RESULT 6
US-08-882-704A-16/c
; Sequence 16, Application US/08882704A
; Patent No. 5879906
; GENERAL INFORMATION:
; APPLICANT: Jefferson, Richard A.
; APPLICANT: Wilson, Katherine J.
; APPLICANT: Leader, Michael
; TITLE OF INVENTION: GLUCURONIDE REPRESSORS AND USES THEREOF
; NUMBER OF SEQUENCES: 19
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: SEED and BERRY LLP
; STREET: 6300 Columbia Center, 701 Fifth Avenue
; CITY: Seattle
; STATE: Washington
; COUNTRY: USA
; ZIP: 98104-7092
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: IBM PC compatible
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/882,704A
; FILING DATE: 25-JUN-1997
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: No. 5879906tenburg Ph.D., Carol
; REGISTRATION NUMBER: 39,317
; REFERENCE/DOCKET NUMBER: 190106.404
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (206) 622-4900
; TELEFAX: (206) 682-6031
; INFORMATION FOR SEQ ID NO: 18:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 22 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
US-09-151-957-18
Query Match 100.0%; Score 10; DB 3; Length 22;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 18 CGAACGTTTCG 9

RESULT 5
US-08-882-704A-16
; Sequence 16, Application US/08882704A
; Patent No. 5879906
; GENERAL INFORMATION:
; APPLICANT: Jefferson, Richard A.

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REFERENCE/DOCKET NUMBER: 190106.404	
TELECOMMUNICATION INFORMATION:	
TELEPHONE: (206) 622-4900	
TELEFAX: (206) 682-6031	
INFORMATION FOR SEQ ID NO: 16:	
SEQUENCE CHARACTERISTICS:	
LENGTH: 48 base pairs	
TYPE: nucleic acid	
STRANDEDNESS: single	
TOPOLOGY: linear	
US-08-882-704A-16	
Query Match	100.0%; Score 10; DB 2; Length 48;
Best Local Similarity	100.0%; Pred. No. 1.2e+03;
Matches	10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy	1 CGAACGTTTCG 10
Db	34 CGAACGTTTCG 25
RESULT 7	
US-09-151-957-16	
Sequence 16, Application US/09151957	
Patent No. 6429292	
GENERAL INFORMATION:	
APPLICANT: Jefferson, Richard A.	
Leader, Michael	
Wilson, Katherine J.	
TITLE OF INVENTION: GLUCURONIDE REPRESSORS AND USES THEREOF	
NUMBER OF SEQUENCES: 19	
CORRESPONDENCE ADDRESS:	
ADDRESSEE: SEED AND BERRY LLP	
STREET: 6300 Columbia Center, 701 Fifth Avenue	
CITY: Seattle	
STATE: Washington	
COUNTRY: USA	
ZIP: 98104-7092	
COMPUTER READABLE FORM:	
MEDIUM TYPE: Floppy disk	
COMPUTER: IBM PC compatible	
OPERATING SYSTEM: PC-DOS/MS-DOS	
SOFTWARE: Patent in Release #1.0, Version #1.30	
CURRENT APPLICATION DATA:	
APPLICATION NUMBER: US/09/151,957	
FILING DATE: 11-Sep-1998	
CLASSIFICATION: <Unknown>	
PRIOR APPLICATION DATA:	
APPLICATION NUMBER: US 08/882,704	
FILING DATE: <Unknown>	
ATTORNEY/AGENT INFORMATION:	
NAME: No. 6429292tenburg Ph.D., Carol	
REGISTRATION NUMBER: 39,317	
REFERENCE/DOCKET NUMBER: 190106.404	
TELECOMMUNICATION INFORMATION:	
TELEPHONE: (206) 622-4900	
TELEFAX: (206) 682-6031	
INFORMATION FOR SEQ ID NO: 16:	
SEQUENCE CHARACTERISTICS:	
LENGTH: 48 base pairs	
TYPE: nucleic acid	
STRANDEDNESS: single	
TOPOLOGY: linear	
SEQUENCE DESCRIPTION: SEQ ID NO: 16:	
US-09-151-957-16	
Query Match	100.0%; Score 10; DB 3; Length 48;
Best Local Similarity	100.0%; Pred. No. 1.2e+03;
Matches	10; Conservative 0; Mismatches 0; Indels 0;
Qy	1 CGAACGTTTCG 10
Db	34 CGAACGTTTCG 25
RESULT 9	
US-08-633-768A-12	
Sequence 12, Application US/08633768A	
Patent No. 6013504	
GENERAL INFORMATION:	
APPLICANT: YU, SHUKUN	
APPLICANT: BOJSEN, KIRSTEN	
APPLICANT: KRAGH, KARSTEN	
APPLICANT: BOJKO, MAJA	
APPLICANT: NIELSEN, JOHN	
APPLICANT: MARCUSSEN, JAN	
TITLE OF INVENTION: ALPHA-1,4-GLUCAN LYASE FROM	
TITLE OF INVENTION: A FUNGUS INFECTED ALGAE, ITS PURIFICATION	
NUMBER OF SEQUENCES: 25	
CORRESPONDENCE ADDRESS:	
ADDRESSEE: Knobbe, Martens, Olson & Bear	
STREET: 620 Newport Center Drive 16th Floor	
Qy	1 CGAACGTTTCG 10
Db	25 CGAACGTTTCG 34

;; CITY: Newport Beach
;; STATE: CA
;; COUNTRY: U.S.A.
;; ZIP: 92660
;; COMPUTER READABLE FORM:
;; MEDIUM TYPE: Diskette
;; COMPUTER: IBM Compatible
;; OPERATING SYSTEM: DOS
;; SOFTWARE: FastSeq Version 1.5
;; CURRENT APPLICATION DATA:
;; APPLICATION NUMBER: US/08/633,768A
;; FILING DATE: 02-JUL-1996
;; CLASSIFICATION: 435
;; PRIOR APPLICATION DATA:
;; APPLICATION NUMBER: 9321301.5
;; FILING DATE: 15-OCT-1993
;; ATTORNEY/AGENT INFORMATION:
;; NAME: Altman, Daniel E
;; REGISTRATION NUMBER: 34,115
;; REFERENCE/DOCKET NUMBER: DY0U7.001APC
;; TELECOMMUNICATION INFORMATION:
;; TELEPHONE: 714-760-0404
;; TELEFAX: 714-760-9502
;; TELEX:
;; INFORMATION FOR SEQ ID NO: 12:
;; SEQUENCE CHARACTERISTICS:
;; LENGTH: 71 base pairs
;; TYPE: nucleic acid
;; STRANDEDNESS: single
;; TOPOLOGY: linear
;; MOLECULE TYPE: Genomic DNA
;; US-08-633-768A-12

Query Match 100.0%; Score 10; DB 3; Length 71;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
Db 17 CGAACGTTTCG 26

RESULT 10
US-08-633-768A-12/c
; Sequence 12, Application US/08633768A
; Patent No. 6013504
; GENERAL INFORMATION:
; APPLICANT: YU, SHUKUN
; APPLICANT: BOJSEN, KIRSTEN
; APPLICANT: KRAGH, KARSTEN
; APPLICANT: BOJKO, MAJA
; APPLICANT: NIELSEN, JOHN
; APPLICANT: MARCUSSEN, JAN
; TITLE OF INVENTION: ALPHA-1,4-GLUCAN LYASE FROM
; TITLE OF INVENTION: A FUNGUS INFECTED ALGAE, ITS PURIFICATION
; NUMBER OF SEQUENCES: 25
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Knobbe, Martens, Olson & Bear
; STREET: 620 Newport Center Drive 16th Floor
; CITY: Newport Beach
; STATE: CA
; COUNTRY: U.S.A.
; ZIP: 92660
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: FastSeq Version 1.5
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/633,768A
; FILING DATE: 02-JUL-1996
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:

;; APPLICATION NUMBER: 9321301.5
;; FILING DATE: 15-OCT-1993
;; ATTORNEY/AGENT INFORMATION:
;; NAME: Altman, Daniel E
;; REGISTRATION NUMBER: 34,115
;; REFERENCE/DOCKET NUMBER: DY0U7.001APC
;; TELECOMMUNICATION INFORMATION:
;; TELEPHONE: 714-760-0404
;; TELEFAX: 714-760-9502
;; TELEX:
;; INFORMATION FOR SEQ ID NO: 12:
;; SEQUENCE CHARACTERISTICS:
;; LENGTH: 71 base pairs
;; TYPE: nucleic acid
;; STRANDEDNESS: single
;; TOPOLOGY: linear
;; MOLECULE TYPE: Genomic DNA
;; US-08-633-768A-12

Query Match 100.0%; Score 10; DB 3; Length 71;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
Db 26 CGAACGTTTCG 17

RESULT 11
US-09-280-197-22
; Sequence 22, Application US/09280197
; Patent No. 6632643
; GENERAL INFORMATION:
; APPLICANT: Yu, Shukun
; APPLICANT: Bojsen, Kirsten
; APPLICANT: Kragh, Karsten
; APPLICANT: Bojko, Maja
; APPLICANT: Nielsen, John
; APPLICANT: Marcussen, Jan
; APPLICANT: Christensen, Tove
; TITLE OF INVENTION: USE OF 1,4-GLUCAN LYASE FOR PREPARATION OF
; TITLE OF INVENTION: 1,5-D-ANHYDROFRUCTOSE
; NUMBER OF SEQUENCES: 39
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Knobbe, Martens, Olson & Bear
; STREET: 620 Newport Center Drive 16th Floor
; CITY: Newport Beach
; STATE: CA
; COUNTRY: U.S.A.
; ZIP: 92660
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25 (BPO)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/280,197
; FILING DATE:
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/633,719
; FILING DATE: July 8, 1996
; APPLICATION NUMBER: PCT/EP94/03397
; FILING DATE: OCT-15-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Altman, Daniel E
; REGISTRATION NUMBER: 34,115
; REFERENCE/DOCKET NUMBER: DY0U5.001APC
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 714-760-0404
; TELEFAX: 714-760-9502
; TELEX:
; INFORMATION FOR SEQ ID NO: 22:

SEQUENCE CHARACTERISTICS:
LENGTH: 71 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
MOLECULE TYPE: cdna
US-09-280-197-22

Query Match 100.0%; Score 10; DB 4; Length 71;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 17 CGAACGTTTCG 26

RESULT 12

US-09-280-197-22/c
Sequence 22, Application US/09280197
Patent No. 6632643
GENERAL INFORMATION:
APPLICANT: Yu, Shukun
APPLICANT: Bojsen, Kirsten
APPLICANT: Kragh, Karsten
APPLICANT: Bojko, Maja
APPLICANT: Nielsen, John
APPLICANT: Marcussen, Jan
APPLICANT: Christensen, Tove
TITLE OF INVENTION: USE OF 1,4-GLUCAN LYASE FOR PREPARATION OF
TITLE OF INVENTION: 1,5-D-ANHYDROFRUCTOSE
NUMBER OF SEQUENCES: 39
CORRESPONDENCE ADDRESS:
ADDRESSEE: Knobbe, Martens, Olson & Bear
STREET: 620 Newport Center Drive 16th Floor
CITY: Newport Beach
STATE: CA
COUNTRY: U.S.A.
ZIP: 92660

COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25 (EPO)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/280,197
FILING DATE:
CLASSIFICATION: 435

PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/633,719
FILING DATE: July 8, 1996
APPLICATION NUMBER: PCT/EP94/03397
FILING DATE: OCT-15-1994
ATTORNEY/AGENT INFORMATION:
NAME: Altman, Daniel E
REGISTRATION NUMBER: 34,115
REFERENCE/DOCKET NUMBER: DYOUS.001APC
TELECOMMUNICATION INFORMATION:
TELEPHONE: 714-760-0404
TELEFAX: 714-760-9502
TELEX:
INFORMATION FOR SEQ ID NO: 22:

SEQUENCE CHARACTERISTICS:
LENGTH: 71 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
MOLECULE TYPE: cdna
US-09-280-197-22

Query Match 100.0%; Score 10; DB 4; Length 71;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 26 CGAACGTTTCG 17

RESULT 13

US-08-399-412A-58
Sequence 58, Application US/08399412A
Patent No. 5622828
GENERAL INFORMATION:
APPLICANT: Parma, David
APPLICANT: Gold, Larry
TITLE OF INVENTION: High-Affinity Oligonucleotide
TITLE OF INVENTION: Ligands To Secretory Phospholipase
TITLE OF INVENTION: A2 (sPLA2)
NUMBER OF SEQUENCES: 122
CORRESPONDENCE ADDRESS:
ADDRESSEE: Swanson & Bratechun, L.L.C.
STREET: 8400 E. Prentice Avenue, Suite 200
CITY: Englewood
STATE: Colorado
COUNTRY: USA
ZIP: 80111
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 3.5 inch, 1.44 MB storage
COMPUTER: IBM compatible
OPERATING SYSTEM: MS-DOS
SOFTWARE: WordPerfect 5.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/399,412A
FILING DATE: 6-MARCH-1995
CLASSIFICATION: 536
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/714,131
FILING DATE: 10-JUNE-1991
CLASSIFICATION: 536
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/536,428
FILING DATE: 11-JUNE-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/964,624
FILING DATE: 21-OCTOBER-1992
ATTORNEY/AGENT INFORMATION:
NAME: Julie L. Bernard
REGISTRATION NUMBER: 36,450
REFERENCE/DOCKET NUMBER: NEX27
TELECOMMUNICATION INFORMATION:
TELEPHONE: (303) 793-3333
TELEFAX: (303) 793-3433
INFORMATION FOR SEQ ID NO: 58:
SEQUENCE CHARACTERISTICS:
LENGTH: 77 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
US-08-399-412A-58

Query Match 100.0%; Score 10; DB 1; Length 77;
Best Local Similarity 80.0%; Pred. No. 1.2e+03;
Matches 8; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 48 CGAACGUUCG 57

RESULT 14

US-08-399-412A-58/c
Sequence 58, Application US/08399412A
Patent No. 5622828
GENERAL INFORMATION:
APPLICANT: Parma, David

APPLICANT: Gold, Larry
TITLE OF INVENTION: High-Affinity Oligonucleotide
TITLE OF INVENTION: Ligands to Secretory Phospholipase
TITLE OF INVENTION: A2 (sPLA2)
NUMBER OF SEQUENCES: 122
CORRESPONDENCE ADDRESS:
ADDRESSEE: Swanson & Bratschun, L.L.C. 200
STREET: 8400 E. Prentice Avenue, Suite 200
CITY: Englewood
STATE: Colorado
COUNTRY: USA
ZIP: 80111
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 3.5 inch, 1.44 MB storage
COMPUTER: IBM compatible
OPERATING SYSTEM: MS-DOS
SOFTWARE: Wordperfect 5.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/399,412A
FILING DATE: 6-MARCH-1995
CLASSIFICATION: 536
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/714,131
FILING DATE: 10-JUNE-1991
CLASSIFICATION: 536
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 07/536,428
FILING DATE: 11-JUNE-1990
APPLICATION DATA:
APPLICATION NUMBER: 07/964,624
FILING DATE: 21-OCTOBER-1992
ATTORNEY/AGENT INFORMATION:
NAME: Julie L. Bernard
REGISTRATION NUMBER: 36,450
REFERENCE/DOCKET NUMBER: NEX27
TELECOMMUNICATION INFORMATION:
TELEPHONE: (303) 793-3333
TELEFAX: (303) 793-3433
INFORMATION FOR SEQ ID NO: 58:
SEQUENCE CHARACTERISTICS:
LENGTH: 77 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
US-08-399-412A-58

Query Match 100.0%; Score 10; DB 1; Length 77;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
Db 57 CGAACGTTTCG 48

RESULT 15
US-09-270-767-31109
Sequence 31109, Application US/09270767
Patent No. 6703491
GENERAL INFORMATION:
APPLICANT: Homburger et al.
TITLE OF INVENTION: Nucleic acids and proteins of Drosophila melanogaster
FILE REFERENCE: File Reference: 7326-094
CURRENT APPLICATION NUMBER: US/09/270,767
CURRENT FILING DATE: 1999-03-17
NUMBER OF SEQ ID NOS: 62517
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 31109
LENGTH: 89
TYPE: DNA
ORGANISM: Drosophila melanogaster
US-09-270-767-31109

Query Match 100.0%; Score 10; DB 4; Length 89;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
Db 14 CGAACGTTTCG 23

RESULT 16
US-09-270-767-31109/c
Sequence 31109, Application US/09270767
Patent No. 6703491
GENERAL INFORMATION:
APPLICANT: Homburger et al.
TITLE OF INVENTION: Nucleic acids and proteins of Drosophila melanogaster
FILE REFERENCE: File Reference: 7326-094
CURRENT APPLICATION NUMBER: US/09/270,767
CURRENT FILING DATE: 1999-03-17
NUMBER OF SEQ ID NOS: 62517
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 31109
LENGTH: 89
TYPE: DNA
ORGANISM: Drosophila melanogaster
US-09-270-767-31109

Query Match 100.0%; Score 10; DB 4; Length 89;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
Db 23 CGAACGTTTCG 14

RESULT 17
US-08-633-768A-14
Sequence 14, Application US/08633768A
Patent No. 6013504
GENERAL INFORMATION:
APPLICANT: YU, SHUKUN
APPLICANT: BOJSEN, KIRSTEN
APPLICANT: KRAGH, KARSTEN
APPLICANT: BOJKO, MAJA
APPLICANT: NIELSEN, JOHN
APPLICANT: MARCUSSEN, JAN
TITLE OF INVENTION: ALPHA-1,4-GLUCAN LYASE FROM
TITLE OF INVENTION: A FUNGUS INFECTED ALGAE, ITS PURIFICATION
NUMBER OF SEQUENCES: 25
CORRESPONDENCE ADDRESS:
ADDRESSEE: Knobbe, Martens, Olson & Bear
STREET: 620 Newport Center Drive 16th Floor
CITY: Newport Beach
STATE: CA
COUNTRY: U.S.A.
ZIP: 92660
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq Version 1.5
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/633,768A
FILING DATE: 02-JUL-1996
PRIOR APPLICATION DATA:
CLASSIFICATION: 435
APPLICATION NUMBER: 9321301.5
FILING DATE: 15-OCT-1993
ATTORNEY/AGENT INFORMATION:
NAME: Altman, Daniel E
REGISTRATION NUMBER: 34,115
REFERENCE/DOCKET NUMBER: DY0U7.001APC

TELECOMMUNICATION INFORMATION:

TELEPHONE: 714-760-0404
TELEFAX: 714-760-9502

INFORMATION FOR SEQ ID NO: 14:

SEQUENCE CHARACTERISTICS:
LENGTH: 160 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: Genomic DNA
US-08-633-768A-14

Query Match 100.0%; Score 10; DB 3; Length 160;

Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 17 CGAACGTTTCG 26

RESULT 18

US-08-633-768A-14/c
; Sequence 14, Application US/08633768A
; Patent No. 6013504

GENERAL INFORMATION:

APPLICANT: YU, SHUKUN
APPLICANT: BOJSEN, KIRSTEN
APPLICANT: KRAGH, KARSTEN
APPLICANT: BOJJO, MAJA
APPLICANT: NIELSEN, JOHN
APPLICANT: MARCUSSEN, JAN
TITLE OF INVENTION: ALPHA-1,4-GLUCAN LYASE FROM
A FUNGUS INFECTED ALGAE, ITS PURIFICATION
NUMBER OF SEQUENCES: 25
CORRESPONDENCE ADDRESS:
ADDRESSEE: Knobbe, Martens, Olson & Bear
STREET: 620 Newport Center Drive 16th Floor
CITY: Newport Beach
STATE: CA
COUNTRY: U.S.A.
ZIP: 92660

COMPUTER READABLE FORM:

COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq Version 1.5
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/633,768A
FILING DATE: 02-JUL-1996
CLASSIFICATION: 435

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 9321301.5
FILING DATE: 15-OCT-1993
ATTORNEY/AGENT INFORMATION:
NAME: Altman, Daniel E
REGISTRATION NUMBER: 34,115
REFERENCE/DOCKET NUMBER: DYOU7.001APC
TELECOMMUNICATION INFORMATION:
TELEPHONE: 714-760-0404
TELEFAX: 714-760-9502

TELEX:

INFORMATION FOR SEQ ID NO: 14:

SEQUENCE CHARACTERISTICS:
LENGTH: 160 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: Genomic DNA
US-08-633-768A-14

Query Match

100.0%; Score 10; DB 3; Length 160;

Best Local Similarity 100.0%; Pred. No. 1.2e+03;

Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 26 CGAACGTTTCG 17

RESULT 19

US-09-280-197-24
; Sequence 24, Application US/09280197
; Patent No. 6632643

GENERAL INFORMATION:

APPLICANT: Yu, Shukun
APPLICANT: Bojsen, Kirsten
APPLICANT: Kragh, Karsten
APPLICANT: Bojko, Maja
APPLICANT: Nielsen, John
APPLICANT: Marcussen, Jan
APPLICANT: Christensen, Tove
TITLE OF INVENTION: USE OF '-1,4-GLUCAN LYASE FOR PREPARATION OF
TITLE OF INVENTION: 1,5-D-ANHYDROFRUCTOSE
NUMBER OF SEQUENCES: 39
CORRESPONDENCE ADDRESS:
ADDRESSEE: Knobbe, Martens, Olson & Bear
STREET: 620 Newport Center Drive 16th Floor
CITY: Newport Beach
STATE: CA
COUNTRY: U.S.A.
ZIP: 92660

COMPUTER READABLE FORM:

COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: Patent In Release #1.0, Version #1.25 (EPO)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/280,197
FILING DATE:
CLASSIFICATION: 435

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 08/633,719
FILING DATE: July 8, 1996
APPLICATION NUMBER: PCT/EP94/03397
FILING DATE: OCT-15-1994
ATTORNEY/AGENT INFORMATION:
NAME: Altman, Daniel E
REGISTRATION NUMBER: 34,115
REFERENCE/DOCKET NUMBER: DYOU5.001APC
TELECOMMUNICATION INFORMATION:
TELEPHONE: 714-760-0404
TELEFAX: 714-760-9502

TELEX:

INFORMATION FOR SEQ ID NO: 24:

SEQUENCE CHARACTERISTICS:
LENGTH: 160 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: linear
MOLECULE TYPE: cdna
US-09-280-197-24

Query Match

100.0%; Score 10; DB 4; Length 160;

Best Local Similarity 100.0%; Pred. No. 1.2e+03;

Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 17 CGAACGTTTCG 26

RESULT 20

US-09-280-197-24/c

; Sequence 24, Application US/09280197

; Patent No. 6632643
; GENERAL INFORMATION:
; APPLICANT: Yu, Shukun
; APPLICANT: Bojeen, Kirsten
; APPLICANT: Kragh, Karsten
; APPLICANT: Bojko, Maja
; APPLICANT: Nielsen, John
; APPLICANT: Marcussen, Jan
; APPLICANT: Christensen, Tove
; TITLE OF INVENTION: USE OF 1-1,4-GLUCAN LYASE FOR PREPARATION OF
; TITLE OF INVENTION: 1,5-D-ANHYDROFRUCTOSE
; NUMBER OF SEQUENCES: 39
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Knobbe, Martens, Olson & Bear
; STREET: 620 Newport Center Drive 16th Floor
; CITY: Newport Beach
; STATE: CA
; COUNTRY: U.S.A.
; ZIP: 92660
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: Patent in Release #1.0, Version #1.25 (EPO)
; CURRENT APPLICATION DATA: US/09/280,197
; APPLICATION NUMBER: US/09/280,197
; FILING DATE:
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 08/633,719
; FILING DATE: July 8, 1996
; APPLICATION NUMBER: PCT/EP94/03397
; FILING DATE: OCT-15-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Altman, Daniel E
; REGISTRATION NUMBER: 34,115
; REFERENCE/DOCKET NUMBER: DPOUS.001APC
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 714-760-0404
; TELEFAX: 714-760-9502
; TELEX:
; INFORMATION FOR SEQ ID NO: 24:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 160 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: cdna
; US-09-280-197-24

Query Match 100.0%; Score 10; DB 4; Length 160;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
Db 26 CGAACGTTTCG 17

RESULT 21
US-09-313-294A-5372
; Sequence 5372, Application US/09313294A
; Patent No. 6476212
; GENERAL INFORMATION:
; APPLICANT: Lalgudi, Raghunath V.
; APPLICANT: Ito, Laura Y.
; TITLE OF INVENTION: POLYNUCLEOTIDES AND POLYPEPTIDES DERIVED FROM CORN EAR
; FILE REFERENCE: PL-0017 US
; CURRENT APPLICATION NUMBER: US/09/313,294A
; CURRENT FILING DATE: 1999-05-14
; SOFTWARE: PERL Program

; SEQ ID NO 5372
; LENGTH: 284
; TYPE: DNA
; ORGANISM: Zea mays
; FEATURE:
; NAME/KEY: misc feature
; OTHER INFORMATION: Incyte ID No. 6476212 700350040H1
; NAME/KEY: unsure
; LOCATION: 272
; OTHER INFORMATION: a, t, c, g, or other
; US-09-313-294A-5372

Query Match 100.0%; Score 10; DB 4; Length 284;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
Db 220 CGAACGTTTCG 229

RESULT 22
US-09-313-294A-5372/c
; Sequence 5372, Application US/09313294A
; Patent No. 6476212
; GENERAL INFORMATION:
; APPLICANT: Lalgudi, Raghunath V.
; APPLICANT: Ito, Laura Y.
; TITLE OF INVENTION: POLYNUCLEOTIDES AND POLYPEPTIDES DERIVED FROM CORN EAR
; FILE REFERENCE: PL-0017 US
; CURRENT APPLICATION NUMBER: US/09/313,294A
; CURRENT FILING DATE: 1999-05-14
; NUMBER OF SEQ ID NOS: 7600
; SOFTWARE: PERL Program
; SEQ ID NO 5372
; LENGTH: 284
; TYPE: DNA
; ORGANISM: Zea mays
; FEATURE:
; NAME/KEY: misc feature
; OTHER INFORMATION: Incyte ID No. 6476212 700350040H1
; NAME/KEY: unsure
; LOCATION: 272
; OTHER INFORMATION: a, t, c, g, or other
; US-09-313-294A-5372

Query Match 100.0%; Score 10; DB 4; Length 284;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
Db 229 CGAACGTTTCG 220

RESULT 23
US-09-252-991A-69
; Sequence 69, Application US/09252991A
; Patent No. 6551795
; GENERAL INFORMATION:
; APPLICANT: Marc J. Rubenfield et al.
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
; TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
; FILE REFERENCE: 107196.136
; CURRENT APPLICATION NUMBER: US/09/252,991A
; CURRENT FILING DATE: 1999-02-18
; PRIOR APPLICATION NUMBER: US 60/074,788
; PRIOR FILING DATE: 1998-02-18
; PRIOR APPLICATION NUMBER: US 60/094,190
; PRIOR FILING DATE: 1998-07-27
; NUMBER OF SEQ ID NOS: 33142
; SEQ ID NO 69

```
; LENGTH: 288
; TYPE: DNA
; ORGANISM: Pseudomonas aeruginosa
US-09-252-991A-69

Query Match      100.0%; Score 10; DB 4; Length 288;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
   |||||
Db 83 CGAACGTTTCG 92

RESULT 24
US-09-252-991A-69/c
; Sequence 69, Application US/09252991A
; Patent No. 6551795
; GENERAL INFORMATION:
; APPLICANT: Marc J. Rubenfield et al.
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
; TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
; FILE REFERENCE: 107196.136
; CURRENT APPLICATION NUMBER: US/09/252,991A
; CURRENT FILING DATE: 1999-02-18
; PRIOR APPLICATION NUMBER: US 60/074,788
; PRIOR FILING DATE: 1998-02-18
; PRIOR APPLICATION NUMBER: US 60/094,190
; PRIOR FILING DATE: 1998-07-27
; NUMBER OF SEQ ID NOS: 33142
; SEQ ID NO 69
; LENGTH: 288
; TYPE: DNA
; ORGANISM: Pseudomonas aeruginosa
US-09-252-991A-69

Query Match      100.0%; Score 10; DB 4; Length 288;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
   |||||
Db 92 CGAACGTTTCG 83

RESULT 25
US-09-902-540-1757
; Sequence 1757, Application US/09902540
; Patent No. 6833447
; GENERAL INFORMATION:
; APPLICANT: Goldman, Barry S.
; APPLICANT: Hinkle, Gregory J.
; APPLICANT: Slater, Steven C.
; APPLICANT: Wiegand, Roger C.
; TITLE OF INVENTION: Myxococcus xanthus Genome Sequences and Uses Thereof
; CURRENT APPLICATION NUMBER: US/09/902,540
; CURRENT FILING DATE: 2001-07-10
; PRIOR APPLICATION NUMBER: 60/217,883
; PRIOR FILING DATE: 2000-07-10
; NUMBER OF SEQ ID NOS: 16825
; SEQ ID NO 1757
; LENGTH: 299
; TYPE: DNA
; ORGANISM: Myxococcus xanthus
US-09-902-540-1757

Query Match      100.0%; Score 10; DB 4; Length 299;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
   |||||
Db 83 CGAACGTTTCG 92
```

```
Db 139 CGAACGTTTCG 148

RESULT 26
US-09-902-540-1757/c
; Sequence 1757, Application US/09902540
; Patent No. 6833447
; GENERAL INFORMATION:
; APPLICANT: Goldman, Barry S.
; APPLICANT: Hinkle, Gregory J.
; APPLICANT: Slater, Steven C.
; APPLICANT: Wiegand, Roger C.
; TITLE OF INVENTION: Myxococcus xanthus Genome Sequences and Uses Thereof
; FILE REFERENCE: 38-10(15849)B
; CURRENT APPLICATION NUMBER: US/09/902,540
; CURRENT FILING DATE: 2001-07-10
; PRIOR APPLICATION NUMBER: 60/217,883
; PRIOR FILING DATE: 2000-07-10
; NUMBER OF SEQ ID NOS: 16825
; SEQ ID NO 1757
; LENGTH: 299
; TYPE: DNA
; ORGANISM: Myxococcus xanthus
US-09-902-540-1757

Query Match      100.0%; Score 10; DB 4; Length 299;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
   |||||
Db 148 CGAACGTTTCG 139

RESULT 27
US-09-240-274-197
; Sequence 197, Application US/09240274
; Patent No. 6255455
; GENERAL INFORMATION:
; APPLICANT: Siegel, Donald L.
; TITLE OF INVENTION: Rh(D)-BINDING PROTEINS AND MAGNETICALLY ACTIVATED CELL
; TITLE OF INVENTION: SORTING METHOD FOR PRODUCTION THEREOF
; FILE REFERENCE: 09596-42U2
; CURRENT APPLICATION NUMBER: US/09/240,274
; CURRENT FILING DATE: 1999-01-29
; EARLIER APPLICATION NUMBER: 60/081,380
; EARLIER FILING DATE: 1998-04-10
; EARLIER APPLICATION NUMBER: 60/028,550
; EARLIER FILING DATE: 1996-10-11
; NUMBER OF SEQ ID NOS: 224
; SOFTWARE: Patentin Ver. 2.0
; SEQ ID NO 197
; LENGTH: 321
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; OTHER INFORMATION: anti-Rh(D) antibody clone SH8
US-09-240-274-197

Query Match      100.0%; Score 10; DB 3; Length 321;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
   |||||
Db 283 CGAACGTTTCG 292

RESULT 28
US-09-240-274-197/c
; Sequence 197, Application US/09240274
; Patent No. 6255455
; GENERAL INFORMATION:
```

```
; APPLICANT: Siegel, Donald L.
; TITLE OF INVENTION: Rh(D)-BINDING PROTEINS AND MAGNETICALLY ACTIVATED CELL
; FILE REFERENCE: 09596-42U2
; CURRENT APPLICATION NUMBER: US/09/240,274
; CURRENT FILING DATE: 1999-01-29
; EARLIER APPLICATION NUMBER: 60/081,380
; EARLIER FILING DATE: 1998-04-10
; EARLIER APPLICATION NUMBER: 60/028,550
; EARLIER FILING DATE: 1996-10-11
; NUMBER OF SEQ ID NOS: 224
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 197
; LENGTH: 321
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; OTHER INFORMATION: anti-Rh(D) antibody clone SH8
US-09-240-274-197

Query Match      100.0%; Score 10; DB 3; Length 321;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1 CGAACGTTTCG 10
Db      292 CGAACGTTTCG 283

RESULT 29
US-09-627-896B-26
; Sequence 26, Application US/09627896B
; Patent No. 6827934
; GENERAL INFORMATION:
; APPLICANT: CO, MAN SUNG
; APPLICANT: VASQUEZ, MAXIMILIANO
; APPLICANT: CARRENO, BEATRIZ
; APPLICANT: CELNIKER, ABBIE CHERYL
; APPLICANT: COLLINS, MARY
; APPLICANT: GOLDMAN, SAMUEL
; APPLICANT: GRAY, GARY S.
; APPLICANT: KNIGHT, ANDREA
; APPLICANT: O'HARA, DENISE
; APPLICANT: RUP, BONITA
; APPLICANT: VELDMAN, GEERTRUIDA M.
; TITLE OF INVENTION: HUMANIZED IMMUNOGLOBULIN REACTIVE WITH B7-2 AND METHODS
; FILE REFERENCE: 08702.0081-01000
; CURRENT APPLICATION NUMBER: US/09/627,896B
; CURRENT FILING DATE: 2000-07-27
; NUMBER OF SEQ ID NOS: 32
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 26
; LENGTH: 339
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; OTHER INFORMATION: H2F light chain variable region
US-09-627-896B-26

Query Match      100.0%; Score 10; DB 4; Length 339;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1 CGAACGTTTCG 10
Db      304 CGAACGTTTCG 313

RESULT 30
US-09-627-896B-26/c
; Sequence 26, Application US/09627896B
; Patent No. 6827934
; GENERAL INFORMATION:
; APPLICANT: CO, MAN SUNG
; APPLICANT: VASQUEZ, MAXIMILIANO
; APPLICANT: CARRENO, BEATRIZ
; APPLICANT: CELNIKER, ABBIE CHERYL
; APPLICANT: COLLINS, MARY
; APPLICANT: GOLDMAN, SAMUEL
; APPLICANT: GRAY, GARY S.
; APPLICANT: KNIGHT, ANDREA
; APPLICANT: O'HARA, DENISE
; APPLICANT: RUP, BONITA
; APPLICANT: VELDMAN, GEERTRUIDA M.
; TITLE OF INVENTION: HUMANIZED IMMUNOGLOBULIN REACTIVE WITH B7-2 AND METHODS
; FILE REFERENCE: 08702.0081-01000
; CURRENT APPLICATION NUMBER: US/09/627,896B
; CURRENT FILING DATE: 2000-07-27
; NUMBER OF SEQ ID NOS: 32
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 26
; LENGTH: 339
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; OTHER INFORMATION: H2F light chain variable region
US-09-627-896B-26

Query Match      100.0%; Score 10; DB 4; Length 339;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1 CGAACGTTTCG 10
Db      304 CGAACGTTTCG 313

RESULT 30
US-09-627-896B-26/c
; Sequence 26, Application US/09627896B
; Patent No. 6827934
; GENERAL INFORMATION:
; APPLICANT: CO, MAN SUNG
; APPLICANT: VASQUEZ, MAXIMILIANO
; APPLICANT: CARRENO, BEATRIZ
; APPLICANT: CELNIKER, ABBIE CHERYL
; APPLICANT: COLLINS, MARY
; APPLICANT: GOLDMAN, SAMUEL
; APPLICANT: GRAY, GARY S.
; APPLICANT: KNIGHT, ANDREA
; APPLICANT: O'HARA, DENISE
; APPLICANT: RUP, BONITA
; APPLICANT: VELDMAN, GEERTRUIDA M.
; TITLE OF INVENTION: HUMANIZED IMMUNOGLOBULIN REACTIVE WITH B7-2 AND METHODS
; FILE REFERENCE: 08702.0081-01000
; CURRENT APPLICATION NUMBER: US/09/627,896B
; CURRENT FILING DATE: 2000-07-27
; NUMBER OF SEQ ID NOS: 32
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 26
; LENGTH: 339
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; OTHER INFORMATION: H2F light chain variable region
US-09-627-896B-26

Query Match      100.0%; Score 10; DB 4; Length 372;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1 CGAACGTTTCG 10
Db      146 CGAACGTTTCG 155

RESULT 32
US-09-328-352-1/c
; Sequence 1, Application US/09328352
; Patent No. 6562958
; GENERAL INFORMATION:
; APPLICANT: Gary L. Breton et al.
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO ACINETOBACTER
; FILE REFERENCE: BAUMANNII FOR DIAGNOSTICS AND THERAPEUTICS
; CURRENT APPLICATION NUMBER: US/09/328,352
; CURRENT FILING DATE: 1999-06-04
; NUMBER OF SEQ ID NOS: 8252
; SEQ ID NO 1
; LENGTH: 372
; TYPE: DNA
; ORGANISM: Acinetobacter baumannii
US-09-328-352-1

Query Match      100.0%; Score 10; DB 4; Length 372;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1 CGAACGTTTCG 10
Db      146 CGAACGTTTCG 155

RESULT 32
US-09-328-352-1/c
; Sequence 1, Application US/09328352
; Patent No. 6562958
; GENERAL INFORMATION:
; APPLICANT: Gary L. Breton et al.
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO ACINETOBACTER
; FILE REFERENCE: BAUMANNII FOR DIAGNOSTICS AND THERAPEUTICS
; CURRENT APPLICATION NUMBER: US/09/328,352
; CURRENT FILING DATE: 1999-06-04
; NUMBER OF SEQ ID NOS: 8252
; SEQ ID NO 1
; LENGTH: 372
; TYPE: DNA
; ORGANISM: Acinetobacter baumannii
US-09-328-352-1
```

; CURRENT FILING DATE: 1999-06-04
; NUMBER OF SEQ ID NOS: 8252
; SEQ ID NO 1
; LENGTH: 372
; TYPE: DNA
; ORGANISM: Acinetobacter baumannii
US-09-328-352-1

Query Match 100.0%; Score 10; DB 4; Length 372;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTGC 10
Db 155 CGAACGTTGC 146

RESULT 33
US-09-252-991A-5259
; Sequence 5259, Application US/09252991A
; Patent No. 6551795
; GENERAL INFORMATION:
; APPLICANT: Marc J. Rubenfield et al.
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
; FILE REFERENCE: 107196.136
; CURRENT APPLICATION NUMBER: US/09/252,991A
; CURRENT FILING DATE: 1999-02-18
; PRIOR APPLICATION NUMBER: US 60/074,788
; PRIOR FILING DATE: 1998-02-18
; PRIOR APPLICATION NUMBER: US 60/094,190
; PRIOR FILING DATE: 1998-07-27
; NUMBER OF SEQ ID NOS: 33142
; SEQ ID NO 5259
; LENGTH: 378
; TYPE: DNA
; ORGANISM: Pseudomonas aeruginosa
US-09-252-991A-5259

Query Match 100.0%; Score 10; DB 4; Length 378;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTGC 10
Db 16 CGAACGTTGC 25

RESULT 34
US-09-252-991A-5259/c
; Sequence 5259, Application US/09252991A
; Patent No. 6551795
; GENERAL INFORMATION:
; APPLICANT: Marc J. Rubenfield et al.
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
; FILE REFERENCE: 107196.136
; CURRENT APPLICATION NUMBER: US/09/252,991A
; CURRENT FILING DATE: 1999-02-18
; PRIOR APPLICATION NUMBER: US 60/074,788
; PRIOR FILING DATE: 1998-02-18
; PRIOR APPLICATION NUMBER: US 60/094,190
; PRIOR FILING DATE: 1998-07-27
; NUMBER OF SEQ ID NOS: 33142
; SEQ ID NO 5259
; LENGTH: 378
; TYPE: DNA
; ORGANISM: Pseudomonas aeruginosa
US-09-252-991A-5259

Query Match 100.0%; Score 10; DB 4; Length 378;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTGC 10
Db 25 CGAACGTTGC 16

RESULT 35
US-08-882-704A-3
; Sequence 3, Application US/08882704A
; Patent No. 5879906
; GENERAL INFORMATION:
; APPLICANT: Jefferson, Richard A.
; APPLICANT: Wilson, Katherine J.
; APPLICANT: Leader, Michael
; TITLE OF INVENTION: GLUCURONIDE REPRESSORS AND USES THEREOF
; NUMBER OF SEQUENCES: 19
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: SEED and BERRY LLP
; STREET: 6300 Columbia Center, 701 Fifth Avenue
; CITY: Seattle
; STATE: Washington
; COUNTRY: USA
; ZIP: 98104-7092
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent in Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/882,704A
; FILING DATE: 25-JUN-1997
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: No. 5879906tenburg Ph.D., Carol
; REGISTRATION NUMBER: 39,317
; REFERENCE/DOCKET NUMBER: 190106.404
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (206) 622-4900
; TELEFAX: (206) 682-6031
; INFORMATION FOR SEQ ID NO: 3:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 390 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
US-08-882-704A-3

Query Match 100.0%; Score 10; DB 2; Length 390;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTGC 10
Db 159 CGAACGTTGC 168

RESULT 36
US-08-882-704A-3/c
; Sequence 3, Application US/08882704A
; Patent No. 5879906
; GENERAL INFORMATION:
; APPLICANT: Jefferson, Richard A.
; APPLICANT: Wilson, Katherine J.
; APPLICANT: Leader, Michael
; TITLE OF INVENTION: GLUCURONIDE REPRESSORS AND USES THEREOF
; NUMBER OF SEQUENCES: 19
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: SEED and BERRY LLP
; STREET: 6300 Columbia Center, 701 Fifth Avenue
; CITY: Seattle
; STATE: Washington
; COUNTRY: USA
; ZIP: 98104-7092

```
;
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/882,704A
; FILING DATE: 25-JUN-1997
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: No. 5879906tenburg Ph.D., Carol
; REGISTRATION NUMBER: 39,317
; REFERENCE/DOCKET NUMBER: 190106.404
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (206) 622-4900
; TELEFAX: (206) 682-6031
; INFORMATION FOR SEQ ID NO: 3:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 390 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; US-08-882-704A-3

Query Match 100.0%; Score 10; DB 2; Length 390;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTGC 10
Db 168 CGAACGTTGC 159

RESULT 37
US-09-151-957-3
; Sequence 3, Application US/09151957
; Patent No. 6429292
; GENERAL INFORMATION:
; APPLICANT: Jefferson, Richard A.
; Leader, Michael
; TITLE OF INVENTION: GLUCURONIDE REPRESSORS AND USES THEREOF
; NUMBER OF SEQUENCES: 19
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: SEED and BERRY LLP
; STREET: 6300 Columbia Center, 701 Fifth Avenue
; CITY: Seattle
; STATE: Washington
; COUNTRY: USA
; ZIP: 98104-7092
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/151,957
; FILING DATE: 11-Sep-1998
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/882,704
; FILING DATE: <Unknown>
; ATTORNEY/AGENT INFORMATION:
; NAME: No. 6429292tenburg Ph.D., Carol
; REGISTRATION NUMBER: 39,317
; REFERENCE/DOCKET NUMBER: 190106.404
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (206) 622-4900
; TELEFAX: (206) 682-6031
; INFORMATION FOR SEQ ID NO: 3:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 390 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; US-09-151-957-3

Query Match 100.0%; Score 10; DB 3; Length 390;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTGC 10
Db 168 CGAACGTTGC 159

RESULT 39
US-09-513-999C-1579
; Sequence 1579, Application US/09513999C
; Patent No. 6783961
; GENERAL INFORMATION:
```

```
;
; STRANDEDNESS: single
; TOPOLOGY: linear
; SEQUENCE DESCRIPTION: SEQ ID NO: 3:
US-09-151-957-3

Query Match 100.0%; Score 10; DB 3; Length 390;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTGC 10
Db 159 CGAACGTTGC 168

RESULT 38
US-09-151-957-3/c
; Sequence 3, Application US/09151957
; Patent No. 6429292
; GENERAL INFORMATION:
; APPLICANT: Jefferson, Richard A.
; Leader, Michael
; TITLE OF INVENTION: GLUCURONIDE REPRESSORS AND USES THEREOF
; NUMBER OF SEQUENCES: 19
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: SEED and BERRY LLP
; STREET: 6300 Columbia Center, 701 Fifth Avenue
; CITY: Seattle
; STATE: Washington
; COUNTRY: USA
; ZIP: 98104-7092
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/151,957
; FILING DATE: 11-Sep-1998
; CLASSIFICATION: <Unknown>
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/882,704
; FILING DATE: <Unknown>
; ATTORNEY/AGENT INFORMATION:
; NAME: No. 6429292tenburg Ph.D., Carol
; REGISTRATION NUMBER: 39,317
; REFERENCE/DOCKET NUMBER: 190106.404
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (206) 622-4900
; TELEFAX: (206) 682-6031
; INFORMATION FOR SEQ ID NO: 3:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 390 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; US-09-151-957-3

Query Match 100.0%; Score 10; DB 3; Length 390;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTGC 10
Db 168 CGAACGTTGC 159

RESULT 39
US-09-513-999C-1579
; Sequence 1579, Application US/09513999C
; Patent No. 6783961
; GENERAL INFORMATION:
```

; APPLICANT: Dumas Milne Edwards, J.B.
; APPLICANT: Duclert, A.
; APPLICANT: Giordano, J.Y.
; TITLE OF INVENTION: Expressed Sequence Tags and Encoded Human Proteins.
; Patent No. 6783961

; FILE REFERENCE: 59.US2.REG
; CURRENT APPLICATION NUMBER: US/09/513,999C
; CURRENT FILING DATE: 2000-02-24
; PRIOR APPLICATION NUMBER: US 60/122,487
; PRIOR FILING DATE: 1999-02-26

; NUMBER OF SEQ ID NOS: 36681
; SOFTWARE: Patent.pm
; SEQ ID NO 1579
; LENGTH: 390

; TYPE: DNA
; ORGANISM: Homo sapiens

; FEATURE:

; NAME/KEY: CDS

; LOCATION: 162..389

; FEATURE:

; NAME/KEY: misc_feature

; LOCATION: 357

; OTHER INFORMATION: r=a or g

; FEATURE:

; NAME/KEY: UNSURE

; LOCATION: 66

; OTHER INFORMATION: Xaa=Glu or Lys

US-09-513-999C-1579

Query Match 100.0%; Score 10; DB 4; Length 390;

Best Local Similarity 100.0%; Pred. No. 1.2e+03;

Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 22 CGAACGTTTCG 31

RESULT 40

US-09-513-999C-1579/c

; Sequence 1579, Application US/09513999C

; Patent No. 6783961

; GENERAL INFORMATION:

; APPLICANT: Dumas Milne Edwards, J.B.

; APPLICANT: Duclert, A.

; APPLICANT: Giordano, J.Y.

; TITLE OF INVENTION: Expressed Sequence Tags and Encoded Human Proteins.

; Patent No. 6783961

; FILE REFERENCE: 59.US2.REG

; CURRENT APPLICATION NUMBER: US/09/513,999C

; CURRENT FILING DATE: 2000-02-24

; PRIOR APPLICATION NUMBER: US 60/122,487

; PRIOR FILING DATE: 1999-02-26

; NUMBER OF SEQ ID NOS: 36681

; SOFTWARE: Patent.pm

; SEQ ID NO 1579

; LENGTH: 390

; TYPE: DNA

; ORGANISM: Homo sapiens

; FEATURE:

; NAME/KEY: CDS

; LOCATION: 162..389

; FEATURE:

; NAME/KEY: misc_feature

; LOCATION: 357

; OTHER INFORMATION: r=a or g

; FEATURE:

; NAME/KEY: UNSURE

; LOCATION: 66

; OTHER INFORMATION: Xaa=Glu or Lys

US-09-513-999C-1579

Query Match 100.0%; Score 10; DB 4; Length 390;

Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 31 CGAACGTTTCG 22

RESULT 41

US-09-060-756-563

; Sequence 563, Application US/09060756

; Patent No. 6183957

; GENERAL INFORMATION:

; APPLICANT: Cole, Stewart

; APPLICANT: Buchrieser-Brosch, Roland

; APPLICANT: Gordon, Stephen

; APPLICANT: Billault, Alain

; TITLE OF INVENTION: METHOD FOR ISOLATING A POLYNUCLEOTIDE OF INTEREST FROM

; TITLE OF INVENTION: THE GENOME OF A MYCOBACTERIUM USING A BAC-BASED DNA

; TITLE OF INVENTION: LIBRARY APPLICATION TO THE DETECTION OF MYCOBACTERIA

; FILE REFERENCE: 3495-0169

; CURRENT APPLICATION NUMBER: US/09/060,756

; CURRENT FILING DATE: 1998-04-16

; NUMBER OF SEQ ID NOS: 743

; SOFTWARE: PatentIn Ver. 2.0

; SEQ ID NO 563

; LENGTH: 406

; TYPE: DNA

; ORGANISM: Mycobacterium tuberculosis

; FEATURE:

; NAME/KEY: unsure

; LOCATION: (various positions within the sequence)

; OTHER INFORMATION: applicants are uncertain of bases designated as "n"

US-09-060-756-563

Query Match 100.0%; Score 10; DB 3; Length 406;

Best Local Similarity 100.0%; Pred. No. 1.2e+03;

Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 289 CGAACGTTTCG 298

RESULT 42

US-09-060-756-563/c

; Sequence 563, Application US/09060756

; Patent No. 6183957

; GENERAL INFORMATION:

; APPLICANT: Cole, Stewart

; APPLICANT: Buchrieser-Brosch, Roland

; APPLICANT: Gordon, Stephen

; APPLICANT: Billault, Alain

; TITLE OF INVENTION: METHOD FOR ISOLATING A POLYNUCLEOTIDE OF INTEREST FROM

; TITLE OF INVENTION: THE GENOME OF A MYCOBACTERIUM USING A BAC-BASED DNA

; TITLE OF INVENTION: LIBRARY APPLICATION TO THE DETECTION OF MYCOBACTERIA

; FILE REFERENCE: 3495-0169

; CURRENT APPLICATION NUMBER: US/09/060,756

; CURRENT FILING DATE: 1998-04-16

; NUMBER OF SEQ ID NOS: 743

; SOFTWARE: PatentIn Ver. 2.0

; SEQ ID NO 563

; LENGTH: 406

; TYPE: DNA

; ORGANISM: Mycobacterium tuberculosis

; FEATURE:

; NAME/KEY: unsure

; LOCATION: (various positions within the sequence)

; OTHER INFORMATION: applicants are uncertain of bases designated as "n"

US-09-060-756-563

Query Match 100.0%; Score 10; DB 3; Length 406;

Best Local Similarity 100.0%; Pred. No. 1.2e+03;

Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
| | | | | | | | | |
Db 298 CGAACGTTTCG 289

RESULT 43
US-09-670-314-563
; Sequence 563, Application US/09670314
; Patent No. 6492506
; GENERAL INFORMATION:
; APPLICANT: Cole, Stewart
; APPLICANT: Buchrieser-Brosch, Roland
; APPLICANT: Gordon, Stephen
; APPLICANT: Billault, Alain
; TITLE OF INVENTION: METHOD FOR ISOLATING A POLYNUCLEOTIDE OF INTEREST FROM
; TITLE OF INVENTION: THE GENOME OF A MYCOBACTERIUM USING A BAC-BASED DNA
; TITLE OF INVENTION: LIBRARY APPLICATION TO THE DETECTION OF MYCOBACTERIA
; FILE REFERENCE: 3495-0169
; CURRENT APPLICATION NUMBER: US/09/670.314
; CURRENT FILING DATE: 2001-01-12
; PRIOR APPLICATION NUMBER: 09/060,756
; PRIOR FILING DATE: 1998-04-16
; NUMBER OF SEQ ID NOS: 743
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 563
; LENGTH: 406
; TYPE: DNA
; ORGANISM: Mycobacterium tuberculosis
; FEATURE:
; NAME/KEY: unsure
; LOCATION: (various positions within the sequence)
; OTHER INFORMATION: applicants are uncertain of bases designated as "n"
US-09-670-314-563

Query Match 100.0%; Score 10; DB 4; Length 406;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
| | | | | | | | | |
Db 289 CGAACGTTTCG 298

RESULT 44
US-09-670-314-563/c
; Sequence 563, Application US/09670314
; Patent No. 6492506
; GENERAL INFORMATION:
; APPLICANT: Cole, Stewart
; APPLICANT: Buchrieser-Brosch, Roland
; APPLICANT: Gordon, Stephen
; APPLICANT: Billault, Alain
; TITLE OF INVENTION: METHOD FOR ISOLATING A POLYNUCLEOTIDE OF INTEREST FROM
; TITLE OF INVENTION: THE GENOME OF A MYCOBACTERIUM USING A BAC-BASED DNA
; TITLE OF INVENTION: LIBRARY APPLICATION TO THE DETECTION OF MYCOBACTERIA
; FILE REFERENCE: 3495-0169
; CURRENT APPLICATION NUMBER: US/09/670.314
; CURRENT FILING DATE: 2001-01-12
; PRIOR APPLICATION NUMBER: 09/060,756
; PRIOR FILING DATE: 1998-04-16
; NUMBER OF SEQ ID NOS: 743
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 563
; LENGTH: 406
; TYPE: DNA
; ORGANISM: Mycobacterium tuberculosis
; FEATURE:
; NAME/KEY: unsure
; LOCATION: (various positions within the sequence)
; OTHER INFORMATION: applicants are uncertain of bases designated as "n"
US-09-670-314-563

Query Match 100.0%; Score 10; DB 4; Length 406;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
| | | | | | | | | |
Db 298 CGAACGTTTCG 289

RESULT 45
US-09-107-433-1794
; Sequence 1794, Application US/09107433
; Patent No. 6800744
; GENERAL INFORMATION:
; APPLICANT: Lynn A Doucette-Stamm and David Bush
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID
; SEQUENCES RELATING TO STREPTOCOCCUS PNEUMONIAE
; THERAPEUTICS

NUMBER OF SEQUENCES: 5206
CORRESPONDENCE ADDRESS:
ADDRESSEE: GENOME THERAPEUTICS CORPORATION
STREET: 100 Beaver Street
CITY: Walham
STATE: Massachusetts
COUNTRY: USA
ZIP: 02354

COMPUTER READABLE FORM:
MEDIUM TYPE: CD-ROM ISO9660
COMPUTER: <unknown>
OPERATING SYSTEM: <unknown>
SOFTWARE: <unknown>

CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/107.433
FILING DATE: 30-Jun-1998

PRIOR APPLICATION DATA:
APPLICATION NUMBER: 60/ 085131
FILING DATE: May 12, 1998
APPLICATION NUMBER: 60/051553
FILING DATE: July 2, 1997

ATTORNEY/AGENT INFORMATION:
NAME: Ariniello, Pamela Deneke
REGISTRATION NUMBER: 40,489
REFERENCE/DOCKET NUMBER: GTC-011

TELECOMMUNICATION INFORMATION:
TELEPHONE: (781)893-5007

TELEFAX: (781)893-8277

INFORMATION FOR SEQ ID NO: 1794:
SEQUENCE CHARACTERISTICS:

LENGTH: 480 base pairs
TYPE: nucleic acid

STRANDEDNESS: double

TOPOLOGY: circular

MOLECULE TYPE: DNA (genomic)

HYPOTHETICAL: NO

ANTI-SENSE: NO

ORIGINAL SOURCE:

ORGANISM: Streptococcus pneumoniae

FEATURE:

NAME/KEY: misc feature

LOCATION: (B) LOCATION 1...480

SEQUENCE DESCRIPTION: SEQ ID NO: 1794:

US-09-107-433-1794

Query Match 100.0%; Score 10; DB 4; Length 480;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
| | | | | | | | | |
Db 37 CGAACGTTTCG 46

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RESULT 46
US-09-107-433-1794/c
; Sequence 1794, Application US/09107433
; Patent No. 6800744
; GENERAL INFORMATION:
; APPLICANT: Lynn A Doucette-Stamm and David Bush
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID
; SEQUENCES RELATING TO STREPTOCOCCUS PNEUMONIAE
; THERAPEUTICS
;
; NUMBER OF SEQUENCES: 5206
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: GENOME THERAPEUTICS CORPORATION
; STREET: 100 Beaver Street
; CITY: Waltham
; STATE: Massachusetts
; COUNTRY: USA
; ZIP: 02354
; COMPUTER READABLE FORM:
; MEDIUM TYPE: CD-ROM ISO9660
; COMPUTER: <Unknown>
; OPERATING SYSTEM: <Unknown>
; SOFTWARE: <Unknown>
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/107,433
; FILING DATE: 30-Jun-1998
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 60/ 085131
; FILING DATE: May 12, 1998
; APPLICATION NUMBER: 60/051553
; FILING DATE: July 2, 1997
; ATTORNEY/AGENT INFORMATION:
; NAME: Ariniello, Pamela Deneke
; REGISTRATION NUMBER: 40,489
; REFERENCE/DOCKET NUMBER: GTC-011
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (781)893-5007
; TELEFAX: (781)893-8277
; INFORMATION FOR SEQ ID NO: 1794:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 480 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: circular
; MOLECULE TYPE: DNA (genomic)
; HYPOTHETICAL: NO
; ANTI-SENSE: NO
; ORIGINAL SOURCE:
; ORGANISM: Streptococcus pneumoniae
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (B) LOCATION 1...480
; SEQUENCE DESCRIPTION: SEQ ID NO: 1794:
US-09-107-433-1794
Query Match 100.0%; Score 10; DB 4; Length 480;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
| | | | | | | |
Db 46 CGAACGTTTCG 37

RESULT 47
US-09-270-767-30406
; Sequence 30406, Application US/09270767
; Patent No. 6703491
; GENERAL INFORMATION:
; APPLICANT: Homburger et al.
; TITLE OF INVENTION: Nucleic acids and proteins of Drosophila melanogaster
; FILE REFERENCE: File Reference: 7326-094
; CURRENT APPLICATION NUMBER: US/09/270,767
; CURRENT FILING DATE: 1999-03-17
; NUMBER OF SEQ ID NOS: 521
; SOFTWARE: FASTSEQ for Windows Version 4.0
; SEQ ID NO 3503
; LENGTH: 521
; TYPE: DNA
; ORGANISM: Human
US-09-270-767-30406
Query Match 100.0%; Score 10; DB 4; Length 521;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
| | | | | | | |
Db 275 CGAACGTTTCG 266

RESULT 48
US-09-270-767-30406/c
; Sequence 30406, Application US/09270767
; Patent No. 6703491
; GENERAL INFORMATION:
; APPLICANT: Homburger et al.
; TITLE OF INVENTION: Nucleic acids and proteins of Drosophila melanogaster
; FILE REFERENCE: File Reference: 7326-094
; CURRENT APPLICATION NUMBER: US/09/270,767
; CURRENT FILING DATE: 1999-03-17
; NUMBER OF SEQ ID NOS: 521
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 30406
; LENGTH: 508
; TYPE: DNA
; ORGANISM: Drosophila melanogaster
US-09-270-767-30406
Query Match 100.0%; Score 10; DB 4; Length 508;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
| | | | | | | |
Db 266 CGAACGTTTCG 275

RESULT 49
US-09-949-016-3503
; Sequence 3503, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: CL001307
; CURRENT APPLICATION NUMBER: US/09/949,016
; CURRENT FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/241,755
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 60/237,768
; PRIOR FILING DATE: 2000-10-03
; PRIOR APPLICATION NUMBER: 60/231,498
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 3503
; LENGTH: 521
; TYPE: DNA
; ORGANISM: Human
US-09-949-016-3503
Query Match 100.0%; Score 10; DB 4; Length 521;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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Qy 1 CGAACGTTTCG 10
|
Db 212 CGAACGTTTCG 221

RESULT 50
US-09-949-016-3503/c
; Sequence 3503, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: CL001307
; CURRENT APPLICATION NUMBER: US/09/949,016
; CURRENT FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/241,755
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 60/237,768
; PRIOR FILING DATE: 2000-10-03
; PRIOR APPLICATION NUMBER: 60/231,498
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 3503
; LENGTH: 521
; TYPE: DNA
; ORGANISM: Human
US-09-949-016-3503

Query Match 100.0%; Score 10; DB 4; Length 521;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
|
Db 221 CGAACGTTTCG 212

RESULT 51
US-09-222-575-152
; Sequence 152, Application US/09222575
; Patent No. 6387697
; GENERAL INFORMATION:
; APPLICANT: Yugu, Jiang
; APPLICANT: Dillon, Davin C.
; APPLICANT: Mitcham, Jennifer L.
; APPLICANT: Xu, Jiangchun
; TITLE OF INVENTION: Compositions for the Treatment and Diagnosis of Breast Cancer
; FILE REFERENCE: 210121.470
; CURRENT APPLICATION NUMBER: US/09/222,575
; CURRENT FILING DATE: 1998-12-28
; NUMBER OF SEQ ID NOS: 174
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 152
; LENGTH: 553
; TYPE: DNA
; ORGANISM: Human
; FEATURE:
; NAME/KEY: modified_base
; LOCATION: (293)
; OTHER INFORMATION: Where n is a, c, g or t
; NAME/KEY: modified_base
; LOCATION: (432)
; OTHER INFORMATION: Where n is a, c, g or t
; NAME/KEY: modified_base
; LOCATION: (459)
; OTHER INFORMATION: Where n is a, c, g or t
; NAME/KEY: modified_base
; LOCATION: (481)
; OTHER INFORMATION: Where n is a, c, g or t
; NAME/KEY: modified_base
; LOCATION: (536)
; OTHER INFORMATION: Where n is a, c, g or t
; US-09-222-575-152

Query Match 100.0%; Score 10; DB 4; Length 521;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

; LOCATION: (536)
; OTHER INFORMATION: Where n is a, c, g or t
US-09-222-575-152

Query Match 100.0%; Score 10; DB 3; Length 553;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
|
Db 197 CGAACGTTTCG 206

RESULT 52
US-09-222-575-152/c
; Sequence 152, Application US/09222575
; Patent No. 6387697
; GENERAL INFORMATION:
; APPLICANT: Yugu, Jiang
; APPLICANT: Dillon, Davin C.
; APPLICANT: Mitcham, Jennifer L.
; APPLICANT: Xu, Jiangchun
; TITLE OF INVENTION: Compositions for the Treatment and Diagnosis of Breast Cancer
; FILE REFERENCE: 210121.470
; CURRENT APPLICATION NUMBER: US/09/222,575
; CURRENT FILING DATE: 1998-12-28
; NUMBER OF SEQ ID NOS: 174
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 152
; LENGTH: 553
; TYPE: DNA
; ORGANISM: Human
; FEATURE:
; NAME/KEY: modified_base
; LOCATION: (293)
; OTHER INFORMATION: Where n is a, c, g or t
; NAME/KEY: modified_base
; LOCATION: (432)
; OTHER INFORMATION: Where n is a, c, g or t
; NAME/KEY: modified_base
; LOCATION: (459)
; OTHER INFORMATION: Where n is a, c, g or t
; NAME/KEY: modified_base
; LOCATION: (481)
; OTHER INFORMATION: Where n is a, c, g or t
; NAME/KEY: modified_base
; LOCATION: (536)
; OTHER INFORMATION: Where n is a, c, g or t
; US-09-222-575-152

Query Match 100.0%; Score 10; DB 3; Length 553;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
|
Db 206 CGAACGTTTCG 197

RESULT 53
US-09-389-681-152
; Sequence 152, Application US/09389681A
; Patent No. 6518237
; GENERAL INFORMATION:
; APPLICANT: Yuqui, Jiang
; APPLICANT: Dillon, Davin C.
; APPLICANT: Mitcham, Jennifer L.
; APPLICANT: Xu, Jiangchun
; TITLE OF INVENTION: COMPOSITIONS FOR THE TREATMENT AND
; DIAGNOSIS OF BREAST CANCER AND METHODS FOR THEIR USE
; FILE REFERENCE: 210121.470C3
; CURRENT APPLICATION NUMBER: US/09/389,681A

```
; CURRENT FILING DATE: 1999-09-02
; NUMBER OF SEQ ID NOS: 463
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 152
; LENGTH: 553
; TYPE: DNA
; ORGANISM: Homo sapien
; FEATURE:
; NAME/KEY: misc.feature
; LOCATION: (1)...(553)
; OTHER INFORMATION: n = A,T,C or G
US-09-389-681-152

Query Match      100.0%; Score 10; DB 4; Length 553;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1 CGAACGTTTCG 10
Db      197 CGAACGTTTCG 206

RESULT 54
US-09-389-681-152/c
; Sequence 152, Application US/09389681A
; Patent No. 6518237
; GENERAL INFORMATION:
; APPLICANT: Yuqiu, Jiaqin
; APPLICANT: Dillon, Davin C.
; APPLICANT: Mitcham, Jennifer L.
; APPLICANT: Xu, Jiangchun
; APPLICANT: Harlocker, Susan L.
; TITLE OF INVENTION: COMPOSITIONS FOR THE TREATMENT AND
; TITLE OF INVENTION: DIAGNOSIS OF BREAST CANCER AND METHODS FOR THEIR USE
; FILE REFERENCE: 210121.470C3
; CURRENT APPLICATION NUMBER: US/09/389.681A
; CURRENT FILING DATE: 1999-09-02
; NUMBER OF SEQ ID NOS: 463
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 152
; LENGTH: 553
; TYPE: DNA
; ORGANISM: Homo sapien
; FEATURE:
; NAME/KEY: misc.feature
; LOCATION: (1)...(553)
; OTHER INFORMATION: n = A,T,C or G
US-09-389-681-152

Query Match      100.0%; Score 10; DB 4; Length 553;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1 CGAACGTTTCG 10
Db      206 CGAACGTTTCG 197

RESULT 55
US-09-620-405B-152
; Sequence 152, Application US/09620405B
; Patent No. 6528054
; GENERAL INFORMATION:
; APPLICANT: Jiang, Yuqiu
; APPLICANT: Dillon, Davin C.
; APPLICANT: Mitcham, Jennifer L.
; APPLICANT: Xu, Jiangchun
; APPLICANT: Harlocker, Susan L.
; APPLICANT: Hepler, William T.
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY AND
; TITLE OF INVENTION: DIAGNOSIS OF BREAST CANCER
; FILE REFERENCE: 210121.470C8
; CURRENT APPLICATION NUMBER: US/09/620.405B
; CURRENT FILING DATE: 2000-07-20
; NUMBER OF SEQ ID NOS: 495
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 152
; LENGTH: 553
; TYPE: DNA
; ORGANISM: Homo sapien
; FEATURE:
; NAME/KEY: misc.feature
; LOCATION: (1)...(553)
; OTHER INFORMATION: n = A,T,C or G
US-09-620-405B-152

Query Match      100.0%; Score 10; DB 4; Length 553;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1 CGAACGTTTCG 10
Db      206 CGAACGTTTCG 197

RESULT 56
US-09-620-405B-152/c
; Sequence 152, Application US/09620405B
; Patent No. 6528054
; GENERAL INFORMATION:
; APPLICANT: Jiang, Yuqiu
; APPLICANT: Dillon, Davin C.
; APPLICANT: Mitcham, Jennifer L.
; APPLICANT: Xu, Jiangchun
; APPLICANT: Harlocker, Susan L.
; APPLICANT: Hepler, William T.
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY AND
; TITLE OF INVENTION: DIAGNOSIS OF BREAST CANCER
; FILE REFERENCE: 210121.470C8
; CURRENT APPLICATION NUMBER: US/09/620.405B
; CURRENT FILING DATE: 2000-07-20
; NUMBER OF SEQ ID NOS: 495
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 152
; LENGTH: 553
; TYPE: DNA
; ORGANISM: Homo sapien
; FEATURE:
; NAME/KEY: misc.feature
; LOCATION: (1)...(553)
; OTHER INFORMATION: n = A,T,C or G
US-09-620-405B-152

Query Match      100.0%; Score 10; DB 4; Length 553;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1 CGAACGTTTCG 10
Db      206 CGAACGTTTCG 197

RESULT 57
US-09-339-338-152
; Sequence 152, Application US/09339338A
; Patent No. 6573368
; GENERAL INFORMATION:
; APPLICANT: Yuqiu, Jiaqin
; APPLICANT: Dillon, Davin C.
; APPLICANT: Mitcham, Jennifer L.
; APPLICANT: Xu, Jiangchun
; APPLICANT: Harlocker, Susan L.
; APPLICANT: Hepler, William T.
; TITLE OF INVENTION: COMPOSITIONS FOR THE TREATMENT AND
; TITLE OF INVENTION: DIAGNOSIS OF BREAST CANCER AND METHODS FOR THEIR USE
; FILE REFERENCE: 210121.470C2
; CURRENT APPLICATION NUMBER: US/09/339.338A
; CURRENT FILING DATE: 1999-06-23
; NUMBER OF SEQ ID NOS: 315
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; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 152
; LENGTH: 553
; TYPE: DNA
; ORGANISM: Homo sapien
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)...(553)
; OTHER INFORMATION: n = A,T,C or G
US-09-339-338-152

Query Match 100.0%; Score 10; DB 4; Length 553;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
|||
Db 197 CGAACGTTTCG 206

RESULT 58
US-09-339-338-152/c
; Sequence 152, Application US/09339338A
; Patent No. 6573368
; GENERAL INFORMATION:
; APPLICANT: Yuqiu, Yugu
; APPLICANT: Dillon, Davin C.
; APPLICANT: Mitcham, Jennifer L.
; APPLICANT: Xu, Jiangchun
; TITLE OF INVENTION: COMPOSITIONS FOR THE TREATMENT AND
; TITLE OF INVENTION: DIAGNOSIS OF BREAST CANCER AND METHODS FOR THEIR USE
; FILE REFERENCE: 210121.470C2
; CURRENT APPLICATION NUMBER: US/09/339.338A
; CURRENT FILING DATE: 1999-06-23
; NUMBER OF SEQ ID NOS: 315
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 152
; LENGTH: 553
; TYPE: DNA
; ORGANISM: Homo sapien
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)...(553)
; OTHER INFORMATION: n = A,T,C or G
US-09-339-338-152

Query Match 100.0%; Score 10; DB 4; Length 553;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
|||
Db 206 CGAACGTTTCG 197

RESULT 59
US-09-433-826B-152
; Sequence 152, Application US/09433826B
; Patent No. 6579973
; GENERAL INFORMATION:
; APPLICANT: Jiang, Yuqiu
; APPLICANT: Dillon, Davin C.
; APPLICANT: Mitcham, Jennifer L.
; APPLICANT: Xu, Jiangchun
; APPLICANT: Harlocker, Susan L.
; TITLE OF INVENTION: COMPOSITIONS FOR THE TREATMENT AND
; TITLE OF INVENTION: DIAGNOSIS OF BREAST CANCER AND METHODS FOR THEIR USE
; FILE REFERENCE: 210121.470C4
; CURRENT APPLICATION NUMBER: US/09/433.826B
; CURRENT FILING DATE: 1999-11-03
; NUMBER OF SEQ ID NOS: 474
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 152

; LENGTH: 553
; TYPE: DNA
; ORGANISM: Homo sapien
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)...(553)
; OTHER INFORMATION: n = A,T,C or G
US-09-433-826B-152

Query Match 100.0%; Score 10; DB 4; Length 553;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
|||
Db 197 CGAACGTTTCG 206

RESULT 60
US-09-433-826B-152/c
; Sequence 152, Application US/09433826B
; Patent No. 6579973
; GENERAL INFORMATION:
; APPLICANT: Jiang, Yuqiu
; APPLICANT: Dillon, Davin C.
; APPLICANT: Mitcham, Jennifer L.
; APPLICANT: Xu, Jiangchun
; APPLICANT: Harlocker, Susan L.
; TITLE OF INVENTION: COMPOSITIONS FOR THE TREATMENT AND
; TITLE OF INVENTION: DIAGNOSIS OF BREAST CANCER AND METHODS FOR THEIR USE
; FILE REFERENCE: 210121.470C4
; CURRENT APPLICATION NUMBER: US/09/433.826B
; CURRENT FILING DATE: 1999-11-03
; NUMBER OF SEQ ID NOS: 474
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 152
; LENGTH: 553
; TYPE: DNA
; ORGANISM: Homo sapien
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)...(553)
; OTHER INFORMATION: n = A,T,C or G
US-09-433-826B-152

Query Match 100.0%; Score 10; DB 4; Length 553;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
|||
Db 206 CGAACGTTTCG 197

RESULT 61
US-09-604-287A-152
; Sequence 152, Application US/09604287A
; Patent No. 6586572
; GENERAL INFORMATION:
; APPLICANT: Jiang, Yuqiu
; APPLICANT: Dillon, Davin C.
; APPLICANT: Mitcham, Jennifer L.
; APPLICANT: Xu, Jiangchun
; APPLICANT: Harlocker, Susan L.
; APPLICANT: Hepler, William T.
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY AND
; TITLE OF INVENTION: DIAGNOSIS OF BREAST CANCER
; FILE REFERENCE: 210121.470C7
; CURRENT APPLICATION NUMBER: US/09/604.287A
; CURRENT FILING DATE: 2000-06-22
; NUMBER OF SEQ ID NOS: 489
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 152

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; LENGTH: 553
; TYPE: DNA
; ORGANISM: Homo sapien
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)...(553)
; OTHER INFORMATION: n = A,T,C or G
US-09-604-287A-152

Query Match          100.0%; Score 10; DB 4; Length 553;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1 CGAACGTTTCG 10
Db      197 CGAACGTTTCG 206

RESULT 62
US-09-604-287A-152/c
; Sequence 152, Application US/09604287A
; Patent No. 6586572
; GENERAL INFORMATION:
; APPLICANT: Jiang, Yuqiu
; APPLICANT: Dillon, Davin C.
; APPLICANT: Mitcham, Jennifer L.
; APPLICANT: Xu, Jiangchun
; APPLICANT: Harlocker, Susan L.
; APPLICANT: Hepler, William T.
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY AND
; TITLE OF INVENTION: DIAGNOSIS OF BREAST CANCER
; FILE REFERENCE: 210121.470C7
; CURRENT APPLICATION NUMBER: US/09/604,287A
; CURRENT FILING DATE: 2000-06-22
; NUMBER OF SEQ ID NOS: 489
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 152
; LENGTH: 553
; TYPE: DNA
; ORGANISM: Homo sapien
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)...(553)
; OTHER INFORMATION: n = A,T,C or G
US-09-604-287A-152

Query Match          100.0%; Score 10; DB 4; Length 553;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1 CGAACGTTTCG 10
Db      206 CGAACGTTTCG 197

RESULT 63
US-09-285-480-152
; Sequence 152, Application US/09285480
; Patent No. 6590076
; GENERAL INFORMATION:
; APPLICANT: Yuqiu, Jiang
; APPLICANT: Dillon, Davin C.
; APPLICANT: Mitcham, Jennifer L.
; APPLICANT: Xu, Jiangchun
; APPLICANT: Harlocker, Susan L.
; APPLICANT: Hepler, William T.
; TITLE OF INVENTION: COMPOSITIONS FOR THE TREATMENT AND
; TITLE OF INVENTION: DIAGNOSIS OF BREAST CANCER AND METHODS FOR THEIR USE
; FILE REFERENCE: 210121.470C1
; CURRENT APPLICATION NUMBER: US/09/285,480
; CURRENT FILING DATE: 1999-04-02
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 152
; LENGTH: 553
```

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; TYPE: DNA
; ORGANISM: Homo sapien
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)...(553)
; OTHER INFORMATION: n = A,T,C or G
US-09-285-480-152

Query Match          100.0%; Score 10; DB 4; Length 553;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1 CGAACGTTTCG 10
Db      197 CGAACGTTTCG 206

RESULT 64
US-09-285-480-152/c
; Sequence 152, Application US/09285480
; Patent No. 6590076
; GENERAL INFORMATION:
; APPLICANT: Yuqiu, Jiang
; APPLICANT: Dillon, Davin C.
; APPLICANT: Mitcham, Jennifer L.
; APPLICANT: Xu, Jiangchun
; TITLE OF INVENTION: COMPOSITIONS FOR THE TREATMENT AND
; TITLE OF INVENTION: DIAGNOSIS OF BREAST CANCER AND METHODS FOR THEIR USE
; FILE REFERENCE: 210121.470C1
; CURRENT APPLICATION NUMBER: US/09/285,480
; CURRENT FILING DATE: 1999-04-02
; NUMBER OF SEQ ID NOS: 181
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 152
; LENGTH: 553
; TYPE: DNA
; ORGANISM: Homo sapien
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)...(553)
; OTHER INFORMATION: n = A,T,C or G
US-09-285-480-152

Query Match          100.0%; Score 10; DB 4; Length 553;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1 CGAACGTTTCG 10
Db      206 CGAACGTTTCG 197

RESULT 65
US-09-834-759-152
; Sequence 152, Application US/09834759
; Patent No. 6680197
; GENERAL INFORMATION:
; APPLICANT: Jiang, Yuqiu
; APPLICANT: Dillon, Davin C.
; APPLICANT: Mitcham, Jennifer L.
; APPLICANT: Xu, Jiangchun
; APPLICANT: Harlocker, Susan L.
; APPLICANT: Hepler, William T.
; APPLICANT: Henderson, Robert A.
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY AND
; TITLE OF INVENTION: DIAGNOSIS OF BREAST CANCER
; FILE REFERENCE: 210121.470C9
; CURRENT APPLICATION NUMBER: US/09/834,759
; CURRENT FILING DATE: 2001-04-13
; NUMBER OF SEQ ID NOS: 547
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 152
; LENGTH: 553
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; ; TYPE: DNA
; ; ORGANISM: Homo sapien
; ; FEATURE:
; ; NAME/KEY: misc feature
; ; LOCATION: (1)...(553)
; ; OTHER INFORMATION: n = A,T,C or G
US-09-834-759-152

Query Match      100.0%; Score 10; DB 4; Length 553;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 197 CGAACGTTTCG 206

RESULT 66
US-09-834-759-152/c
; Sequence 152, Application US/09834759
; Patent No. 6680197
; GENERAL INFORMATION:
; APPLICANT: Jiang, Yugui
; APPLICANT: Dillon, Davin C.
; APPLICANT: Mitcham, Jennifer L.
; APPLICANT: Xu, Jiangchun
; APPLICANT: Harlocker, Susan L.
; APPLICANT: Henderson, Robert A.
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY AND
; FILE REFERENCE: 210121.470C9
; CURRENT APPLICATION NUMBER: US/09/834,759
; CURRENT FILING DATE: 2001-04-13
; NUMBER OF SEQ ID NOS: 547
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 152
; LENGTH: 553
; TYPE: DNA
; ORGANISM: Homo sapien
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)...(553)
; OTHER INFORMATION: n = A,T,C or G
US-09-834-759-152

Query Match      100.0%; Score 10; DB 4; Length 553;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 206 CGAACGTTTCG 197

RESULT 67
US-09-834-759-152
; Sequence 152, Application US/09590751A
; Patent No. 6756477
; GENERAL INFORMATION:
; APPLICANT: Yuqui, Jiang
; APPLICANT: Dillon, Davin C.
; APPLICANT: Mitcham, Jennifer L.
; APPLICANT: Xu, Jiangchun
; APPLICANT: Harlocker, Susan L.
; TITLE OF INVENTION: COMPOSITIONS FOR THE THERAPY AND
; FILE REFERENCE: 210121.470C6
; CURRENT APPLICATION NUMBER: US/09/590,751A
; CURRENT FILING DATE: 2000-06-08
; NUMBER OF SEQ ID NOS: 479
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 152
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; ; LENGTH: 553
; ; TYPE: DNA
; ; ORGANISM: Homo sapien
; ; FEATURE:
; ; NAME/KEY: misc feature
; ; LOCATION: (1)...(553)
; ; OTHER INFORMATION: n = A,T,C or G
US-09-590-751A-152

Query Match      100.0%; Score 10; DB 4; Length 553;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 197 CGAACGTTTCG 206

RESULT 68
US-09-590-751A-152/c
; Sequence 152, Application US/09590751A
; Patent No. 6756477
; GENERAL INFORMATION:
; APPLICANT: Yuqui, Jiang
; APPLICANT: Dillon, Davin C.
; APPLICANT: Mitcham, Jennifer L.
; APPLICANT: Xu, Jiangchun
; APPLICANT: Harlocker, Susan L.
; TITLE OF INVENTION: COMPOSITIONS FOR THE THERAPY AND
; FILE REFERENCE: 210121.470C6
; CURRENT APPLICATION NUMBER: US/09/590,751A
; CURRENT FILING DATE: 2000-06-08
; NUMBER OF SEQ ID NOS: 479
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 152
; LENGTH: 553
; TYPE: DNA
; ORGANISM: Homo sapien
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)...(553)
; OTHER INFORMATION: n = A,T,C or G
US-09-590-751A-152

Query Match      100.0%; Score 10; DB 4; Length 553;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 206 CGAACGTTTCG 197

RESULT 69
US-09-551-621-152
; Sequence 152, Application US/09551621
; Patent No. 6825175
; GENERAL INFORMATION:
; APPLICANT: Yuqui, Jiang
; APPLICANT: Dillon, Davin C.
; APPLICANT: Mitcham, Jennifer L.
; APPLICANT: Xu, Jiangchun
; APPLICANT: Harlocker, Susan L.
; TITLE OF INVENTION: COMPOSITIONS FOR THE TREATMENT AND
; FILE REFERENCE: 210121.470C5
; CURRENT APPLICATION NUMBER: US/09/551,621
; CURRENT FILING DATE: 2000-04-17
; NUMBER OF SEQ ID NOS: 479
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 152
; LENGTH: 553
```

```
; TYPE: DNA
; ORGANISM: Homo sapien
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)..(553)
; OTHER INFORMATION: n = A,T,C or G
US-09-551-621-152

Query Match      100.0%; Score 10; DB 4; Length 553;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 CGAACGTTTCG 10
Db      197 CGAACGTTTCG 206

RESULT 70
US-09-551-621-152/c
; Sequence 152, Application US/09551621
; Patent No. 6825175
; GENERAL INFORMATION:
; APPLICANT: Yuqiu, Jiang
; APPLICANT: Dillon, Davin C.
; APPLICANT: Mitcham, Jennifer L.
; APPLICANT: Xu, Jiangchun
; APPLICANT: Harlocker, Susan L.
; TITLE OF INVENTION: COMPOSITIONS FOR THE TREATMENT AND
; FILE REFERENCE: 210121.470C5
; CURRENT APPLICATION NUMBER: US/09/551,621
; CURRENT FILING DATE: 2000-04-17
; NUMBER OF SEQ ID NOS: 479
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 152
; LENGTH: 553
; TYPE: DNA
; ORGANISM: Homo sapien
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: (1)..(553)
; OTHER INFORMATION: n = A,T,C or G
US-09-551-621-152

Query Match      100.0%; Score 10; DB 4; Length 553;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 CGAACGTTTCG 10
Db      206 CGAACGTTTCG 197

RESULT 71
US-09-621-976-3556
; Sequence 3556, Application US/09621976
; Patent No. 6639063
; GENERAL INFORMATION:
; APPLICANT: Dumas Milne Edwards, J.B.
; APPLICANT: Jobert, S.
; APPLICANT: Giordano, J.Y.
; TITLE OF INVENTION: ESTs and Encoded Human Proteins.
; FILE REFERENCE: GENSET.054PR2
; CURRENT APPLICATION NUMBER: US/09/621,976
; CURRENT FILING DATE: 2000-07-21
; NUMBER OF SEQ ID NOS: 19335
; SOFTWARE: Patent.pm
; SEQ ID NO 3556
; LENGTH: 581
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: 185..448
US-09-621-976-3556/c

Query Match      100.0%; Score 10; DB 4; Length 581;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

; LOCATION: 185..448
US-09-621-976-3556

Query Match      100.0%; Score 10; DB 4; Length 581;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 CGAACGTTTCG 10
Db      45 CGAACGTTTCG 54

RESULT 72
US-09-621-976-3556/c
; Sequence 3556, Application US/09621976
; Patent No. 6639063
; GENERAL INFORMATION:
; APPLICANT: Dumas Milne Edwards, J.B.
; APPLICANT: Jobert, S.
; APPLICANT: Giordano, J.Y.
; TITLE OF INVENTION: ESTs and Encoded Human Proteins.
; FILE REFERENCE: GENSET.054PR2
; CURRENT APPLICATION NUMBER: US/09/621,976
; CURRENT FILING DATE: 2000-07-21
; NUMBER OF SEQ ID NOS: 19335
; SOFTWARE: Patent.pm
; SEQ ID NO 3556
; LENGTH: 581
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: 185..448
US-09-621-976-3556

Query Match      100.0%; Score 10; DB 4; Length 581;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 CGAACGTTTCG 10
Db      54 CGAACGTTTCG 45

RESULT 73
US-09-270-767-26201
; Sequence 26201, Application US/09270767
; Patent No. 6703491
; GENERAL INFORMATION:
; APPLICANT: Homburger et al.
; TITLE OF INVENTION: Nucleic acids and proteins of Drosophila melanogaster
; FILE REFERENCE: File Reference: 7326-094
; CURRENT APPLICATION NUMBER: US/09/270,767
; CURRENT FILING DATE: 1999-03-17
; NUMBER OF SEQ ID NOS: 62517
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 26201
; LENGTH: 581
; TYPE: DNA
; ORGANISM: Drosophila melanogaster
US-09-270-767-26201

Query Match      100.0%; Score 10; DB 4; Length 581;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 CGAACGTTTCG 10
Db      266 CGAACGTTTCG 275

RESULT 74
US-09-270-767-26201/c
```

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; Sequence 26201, Application US/09270767
; Patent No. 6703491
; GENERAL INFORMATION:
; APPLICANT: Homburger et al.
; TITLE OF INVENTION: Nucleic acids and proteins of Drosophila melanogaster
; FILE REFERENCE: File Reference: 7326-094
; CURRENT APPLICATION NUMBER: US/09/270,767
; CURRENT FILING DATE: 1999-03-17
; NUMBER OF SEQ ID NOS: 62517
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 26201
; LENGTH: 581
; TYPE: DNA
; ORGANISM: Drosophila melanogaster
US-09-270-767-26201

Query Match      100.0%; Score 10; DB 4; Length 581;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1 CGAACGTTTCG 10
      |||||
Db      275 CGAACGTTTCG 266

RESULT 75
US-09-252-991A-12907
; Sequence 12907, Application US/09252991A
; Patent No. 6551795
; GENERAL INFORMATION:
; APPLICANT: Marc J. Rubenfield et al.
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
; FILE REFERENCE: 107196.136
; CURRENT APPLICATION NUMBER: US/09/252,991A
; CURRENT FILING DATE: 1999-02-18
; PRIOR APPLICATION NUMBER: US 60/074,788
; PRIOR FILING DATE: 1998-02-18
; PRIOR APPLICATION NUMBER: US 60/094,190
; PRIOR FILING DATE: 1998-07-27
; NUMBER OF SEQ ID NOS: 33142
; SEQ ID NO 12907
; LENGTH: 582
; TYPE: DNA
; ORGANISM: Pseudomonas aeruginosa
US-09-252-991A-12907

Query Match      100.0%; Score 10; DB 4; Length 582;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1 CGAACGTTTCG 10
      |||||
Db      360 CGAACGTTTCG 369

RESULT 76
US-09-252-991A-12907/c
; Sequence 12907, Application US/09252991A
; Patent No. 6551795
; GENERAL INFORMATION:
; APPLICANT: Marc J. Rubenfield et al.
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
; FILE REFERENCE: 107196.136
; CURRENT APPLICATION NUMBER: US/09/252,991A
; CURRENT FILING DATE: 1999-02-18
; PRIOR APPLICATION NUMBER: US 60/074,788
; PRIOR FILING DATE: 1998-02-18
; PRIOR APPLICATION NUMBER: US 60/094,190
; PRIOR FILING DATE: 1998-07-27
; NUMBER OF SEQ ID NOS: 33142
; SEQ ID NO 12907

; Sequence 26201, Application US/09270767
; Patent No. 6703491
; GENERAL INFORMATION:
; APPLICANT: Homburger et al.
; TITLE OF INVENTION: Nucleic acids and proteins of Drosophila melanogaster
; FILE REFERENCE: File Reference: 7326-094
; CURRENT APPLICATION NUMBER: US/09/270,767
; CURRENT FILING DATE: 1999-03-17
; NUMBER OF SEQ ID NOS: 62517
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 26201
; LENGTH: 581
; TYPE: DNA
; ORGANISM: Drosophila melanogaster
US-09-270-767-26201

Query Match      100.0%; Score 10; DB 4; Length 581;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1 CGAACGTTTCG 10
      |||||
Db      275 CGAACGTTTCG 266

RESULT 75
US-09-252-991A-12907
; Sequence 12907, Application US/09252991A
; Patent No. 6551795
; GENERAL INFORMATION:
; APPLICANT: Marc J. Rubenfield et al.
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
; FILE REFERENCE: 107196.136
; CURRENT APPLICATION NUMBER: US/09/252,991A
; CURRENT FILING DATE: 1999-02-18
; PRIOR APPLICATION NUMBER: US 60/074,788
; PRIOR FILING DATE: 1998-02-18
; PRIOR APPLICATION NUMBER: US 60/094,190
; PRIOR FILING DATE: 1998-07-27
; NUMBER OF SEQ ID NOS: 33142
; SEQ ID NO 12907
; LENGTH: 582
; TYPE: DNA
; ORGANISM: Pseudomonas aeruginosa
US-09-252-991A-12907

Query Match      100.0%; Score 10; DB 4; Length 582;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1 CGAACGTTTCG 10
      |||||
Db      360 CGAACGTTTCG 369

RESULT 76
US-09-252-991A-12907/c
; Sequence 12907, Application US/09252991A
; Patent No. 6551795
; GENERAL INFORMATION:
; APPLICANT: Marc J. Rubenfield et al.
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
; FILE REFERENCE: 107196.136
; CURRENT APPLICATION NUMBER: US/09/252,991A
; CURRENT FILING DATE: 1999-02-18
; PRIOR APPLICATION NUMBER: US 60/074,788
; PRIOR FILING DATE: 1998-02-18
; PRIOR APPLICATION NUMBER: US 60/094,190
; PRIOR FILING DATE: 1998-07-27
; NUMBER OF SEQ ID NOS: 33142
; SEQ ID NO 12907

; Sequence 1408, Application US/09489039A
; Patent No. 6610836
; GENERAL INFORMATION:
; APPLICANT: Gary Breton et. al
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO KLEBSIELLA
; FILE REFERENCE: 2709.2004001
; CURRENT APPLICATION NUMBER: US/09/489,039A
; CURRENT FILING DATE: 2000-01-27
; PRIOR APPLICATION NUMBER: US 60/117,747
; PRIOR FILING DATE: 1999-01-29
; NUMBER OF SEQ ID NOS: 14342
; SEQ ID NO 1408
; LENGTH: 597
; TYPE: DNA
; ORGANISM: Klebsiella pneumoniae
US-09-489-039A-1408/c

Query Match      100.0%; Score 10; DB 4; Length 597;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1 CGAACGTTTCG 10
      |||||
Db      582 CGAACGTTTCG 591

RESULT 78
US-09-489-039A-1408/c
; Sequence 1408, Application US/09489039A
; Patent No. 6610836
; GENERAL INFORMATION:
; APPLICANT: Gary Breton et. al
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO KLEBSIELLA
; FILE REFERENCE: 2709.2004001
; CURRENT APPLICATION NUMBER: US/09/489,039A
; CURRENT FILING DATE: 2000-01-27
; PRIOR APPLICATION NUMBER: US 60/117,747
; PRIOR FILING DATE: 1999-01-29
; NUMBER OF SEQ ID NOS: 14342
; SEQ ID NO 1408
; LENGTH: 597
; TYPE: DNA
; ORGANISM: Klebsiella pneumoniae
US-09-489-039A-1408

Query Match      100.0%; Score 10; DB 4; Length 597;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1 CGAACGTTTCG 10
      |||||
Db      591 CGAACGTTTCG 582

RESULT 79
US-09-489-039A-1408
; Sequence 1408, Application US/09489039A
; Patent No. 6610836
; GENERAL INFORMATION:
; APPLICANT: Gary Breton et. al
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO KLEBSIELLA
; FILE REFERENCE: 2709.2004001
; CURRENT APPLICATION NUMBER: US/09/489,039A
; CURRENT FILING DATE: 2000-01-27
; PRIOR APPLICATION NUMBER: US 60/117,747
; PRIOR FILING DATE: 1999-01-29
; NUMBER OF SEQ ID NOS: 14342
; SEQ ID NO 1408
; LENGTH: 597
; TYPE: DNA
; ORGANISM: Klebsiella pneumoniae
US-09-489-039A-1408

Query Match      100.0%; Score 10; DB 4; Length 597;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1 CGAACGTTTCG 10
      |||||
Db      591 CGAACGTTTCG 582

RESULT 79
```

```
US-09-489-039A-4244
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: 185..448
US-09-621-976-3555

Query Match      100.0%; Score 10; DB 4; Length 664;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 CGAACGTTTCG 10
      |||||
Db      45 CGAACGTTTCG 54

RESULT 82
US-09-621-976-3555/c
; Sequence 3555, Application US/09621976
; Patent No. 6639063
; GENERAL INFORMATION:
; APPLICANT: Dumas Milne Edwards, J.B.
; APPLICANT: Jobert, S.
; TITLE OF INVENTION: ESTs and Encoded Human Proteins.
; FILE REFERENCE: GENSET.054PR2
; CURRENT APPLICATION NUMBER: US/09/621,976
; CURRENT FILING DATE: 2000-07-21
; NUMBER OF SEQ ID NOS: 19335
; SOFTWARE: Patent.pm
; SEQ ID NO 3555
; LENGTH: 664
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: 185..448
US-09-621-976-3555

Query Match      100.0%; Score 10; DB 4; Length 664;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 CGAACGTTTCG 10
      |||||
Db      54 CGAACGTTTCG 45

RESULT 83
US-09-270-767-14856
; Sequence 14856, Application US/09270767
; Patent No. 6703491
; GENERAL INFORMATION:
; APPLICANT: Homburger et al.
; TITLE OF INVENTION: Nucleic acids and proteins of Drosophila melanogaster
; FILE REFERENCE: File Reference: 7326-094
; CURRENT APPLICATION NUMBER: US/09/270,767
; CURRENT FILING DATE: 1999-03-17
; NUMBER OF SEQ ID NOS: 62517
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 14856
; LENGTH: 729
; TYPE: DNA
; ORGANISM: Drosophila melanogaster
US-09-270-767-14856

Query Match      100.0%; Score 10; DB 4; Length 729;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 CGAACGTTTCG 10
      |||||
Db      654 CGAACGTTTCG 663
```

```
US-09-489-039A-4244
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: 185..448
US-09-621-976-3555

Query Match      100.0%; Score 10; DB 4; Length 664;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 CGAACGTTTCG 10
      |||||
Db      45 CGAACGTTTCG 54

RESULT 82
US-09-621-976-3555/c
; Sequence 3555, Application US/09621976
; Patent No. 6639063
; GENERAL INFORMATION:
; APPLICANT: Dumas Milne Edwards, J.B.
; APPLICANT: Jobert, S.
; TITLE OF INVENTION: ESTs and Encoded Human Proteins.
; FILE REFERENCE: GENSET.054PR2
; CURRENT APPLICATION NUMBER: US/09/621,976
; CURRENT FILING DATE: 2000-07-21
; NUMBER OF SEQ ID NOS: 19335
; SOFTWARE: Patent.pm
; SEQ ID NO 3555
; LENGTH: 664
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: 185..448
US-09-621-976-3555

Query Match      100.0%; Score 10; DB 4; Length 664;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 CGAACGTTTCG 10
      |||||
Db      54 CGAACGTTTCG 45

RESULT 83
US-09-270-767-14856
; Sequence 14856, Application US/09270767
; Patent No. 6703491
; GENERAL INFORMATION:
; APPLICANT: Homburger et al.
; TITLE OF INVENTION: Nucleic acids and proteins of Drosophila melanogaster
; FILE REFERENCE: File Reference: 7326-094
; CURRENT APPLICATION NUMBER: US/09/270,767
; CURRENT FILING DATE: 1999-03-17
; NUMBER OF SEQ ID NOS: 62517
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 14856
; LENGTH: 729
; TYPE: DNA
; ORGANISM: Drosophila melanogaster
US-09-270-767-14856

Query Match      100.0%; Score 10; DB 4; Length 729;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY      1 CGAACGTTTCG 10
      |||||
Db      654 CGAACGTTTCG 663
```

RESULT 84
US-09-270-767-14856/c
; Sequence 14856, Application US/09270767
; Patent No. 6703491
; GENERAL INFORMATION:
; APPLICANT: Homburger et al.
; TITLE OF INVENTION: Nucleic acids and proteins of *Drosophila melanogaster*
; FILE REFERENCE: File Reference: 7326-094
; CURRENT APPLICATION NUMBER: US/09/270,767
; CURRENT FILING DATE: 1999-03-17
; NUMBER OF SEQ ID NOS: 62517
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 14856
; LENGTH: 729
; TYPE: DNA
; ORGANISM: *Drosophila melanogaster*
US-09-270-767-14856

Query Match 100.0%; Score 10; DB 4; Length 729;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 663 CGAACGTTTCG 654

RESULT 85
US-08-469-260A-22
; Sequence 22, Application US/08469260A
; Patent No. 6451578
; GENERAL INFORMATION:
; APPLICANT: JOHN N. SIMONS
; APPLICANT: TAMI J. PILOT-MATIAS
; APPLICANT: GEORGE J. DAWSON
; APPLICANT: GEORGE G. SCHLAUDER
; APPLICANT: SURESH M. DESAI
; APPLICANT: THOMAS P. LEARY
; APPLICANT: ANTHONY SCOTT MUERHOFF
; APPLICANT: JAMES C. ERKER
; APPLICANT: SHERI L. BUIJK
; APPLICANT: ISA K. MUSHAWAR
; TITLE OF INVENTION: NON-A, NON-B, NON-C, NON-D, NON-E HEPATITIS
; NUMBER OF SEQUENCES: 716
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: ABBOTT LABORATORIES D377/AP6D
; STREET: 100 ABBOTT PARK ROAD
; CITY: ABBOTT PARK
; STATE: IL
; COUNTRY: USA
; ZIP: 60064-3500
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/469,260A
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/08/424,550
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: FOREMSKI, PRISCILLA E.
; REGISTRATION NUMBER: 33,207
; REFERENCE/DOCKET NUMBER: 5527.PC.01
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 708-937-6365
; TELEFAX: 708-938-2623

; INFORMATION FOR SEQ ID NO: 22:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 737 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-469-260A-22

Query Match 100.0%; Score 10; DB 3; Length 737;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 296 CGAACGTTTCG 305

RESULT 86
US-08-469-260A-22/c
; Sequence 22, Application US/08469260A
; Patent No. 6451578
; GENERAL INFORMATION:
; APPLICANT: JOHN N. SIMONS
; APPLICANT: TAMI J. PILOT-MATIAS
; APPLICANT: GEORGE J. DAWSON
; APPLICANT: GEORGE G. SCHLAUDER
; APPLICANT: SURESH M. DESAI
; APPLICANT: THOMAS P. LEARY
; APPLICANT: ANTHONY SCOTT MUERHOFF
; APPLICANT: JAMES C. ERKER
; APPLICANT: SHERI L. BUIJK
; APPLICANT: ISA K. MUSHAWAR
; TITLE OF INVENTION: NON-A, NON-B, NON-C, NON-D, NON-E HEPATITIS
; NUMBER OF SEQUENCES: 716
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: ABBOTT LABORATORIES D377/AP6D
; STREET: 100 ABBOTT PARK ROAD
; CITY: ABBOTT PARK
; STATE: IL
; COUNTRY: USA
; ZIP: 60064-3500
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/469,260A
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/08/424,550
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: FOREMSKI, PRISCILLA E.
; REGISTRATION NUMBER: 33,207
; REFERENCE/DOCKET NUMBER: 5527.PC.01
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 708-937-6365
; TELEFAX: 708-938-2623
; INFORMATION FOR SEQ ID NO: 22:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 737 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-469-260A-22

Query Match 100.0%; Score 10; DB 3; Length 737;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;

Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTGC 10
|||||
Db 305 CGAACGTTGC 296

RESULT 87

US-08-488-446-22
; Sequence 22, Application US/08488446
; Patent No. 6558898
; GENERAL INFORMATION:
; APPLICANT: JOHN N. SIMONS
; APPLICANT: TAMI J. PILOT-MATIAS
; APPLICANT: GEORGE J. DAWSON
; APPLICANT: GEORGE G. SCHLAUDER
; APPLICANT: SURESH M. DESAI
; APPLICANT: THOMAS P. LEARY
; APPLICANT: ANTHONY SCOTT MUERHOFF
; APPLICANT: JAMES C. ERKER
; APPLICANT: SHERI L. BUIJK
; APPLICANT: ISA K. MUSHAWAR
; TITLE OF INVENTION: NON-A, NON-B, NON-C, NON-D, NON-E HEPATITIS
; TITLE OF INVENTION: REAGENTS AND METHODS FOR THEIR USE
; NUMBER OF SEQUENCES: 716
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: ABBOTT LABORATORIES D377/AP6D
; STREET: 100 ABBOTT PARK ROAD
; CITY: ABBOTT PARK
; STATE: IL
; COUNTRY: USA
; ZIP: 60064-3500
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/488,446
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/08/424,550
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: FOREMSKI, PRISCILLA E.
; REGISTRATION NUMBER: 33,207
; REFERENCE/DOCKET NUMBER: 5527.PC.01
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 708-937-6365
; TELEFAX: 708-938-2623
; INFORMATION FOR SEQ ID NO: 22:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 737 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-488-446-22

Query Match 100.0%; Score 10; DB 4; Length 737;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTGC 10
|||||
Db 296 CGAACGTTGC 305

RESULT 88

US-08-488-446-22/c
; Sequence 22, Application US/08488446
; Patent No. 6558898

; GENERAL INFORMATION:
; APPLICANT: JOHN N. SIMONS
; APPLICANT: TAMI J. PILOT-MATIAS
; APPLICANT: GEORGE J. DAWSON
; APPLICANT: GEORGE G. SCHLAUDER
; APPLICANT: SURESH M. DESAI
; APPLICANT: THOMAS P. LEARY
; APPLICANT: ANTHONY SCOTT MUERHOFF
; APPLICANT: JAMES C. ERKER
; APPLICANT: SHERI L. BUIJK
; APPLICANT: ISA K. MUSHAWAR
; TITLE OF INVENTION: NON-A, NON-B, NON-C, NON-D, NON-E HEPATITIS
; TITLE OF INVENTION: REAGENTS AND METHODS FOR THEIR USE
; NUMBER OF SEQUENCES: 716
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: ABBOTT LABORATORIES D377/AP6D
; STREET: 100 ABBOTT PARK ROAD
; CITY: ABBOTT PARK
; STATE: IL
; COUNTRY: USA
; ZIP: 60064-3500
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/488,446
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/08/424,550
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: FOREMSKI, PRISCILLA E.
; REGISTRATION NUMBER: 33,207
; REFERENCE/DOCKET NUMBER: 5527.PC.01
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 708-937-6365
; TELEFAX: 708-938-2623
; INFORMATION FOR SEQ ID NO: 22:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 737 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: DNA (genomic)
US-08-488-446-22

Query Match 100.0%; Score 10; DB 4; Length 737;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTGC 10
|||||
Db 305 CGAACGTTGC 296

RESULT 89

US-08-467-344A-22
; Sequence 22, Application US/08467344A
; Patent No. 6586568
; GENERAL INFORMATION:
; APPLICANT: JOHN N. SIMONS
; APPLICANT: TAMI J. PILOT-MATIAS
; APPLICANT: GEORGE J. DAWSON
; APPLICANT: GEORGE G. SCHLAUDER
; APPLICANT: SURESH M. DESAI
; APPLICANT: THOMAS P. LEARY
; APPLICANT: ANTHONY SCOTT MUERHOFF
; APPLICANT: JAMES C. ERKER
; APPLICANT: SHERI L. BUIJK
; APPLICANT: ISA K. MUSHAWAR

;; TITLE OF INVENTION: NON-A, NON-B, NON-C, NON-D, NON-E HEPATITIS
;; REAGENTS AND METHODS FOR THEIR USE
;;
;; NUMBER OF SEQUENCES: 716
;; CORRESPONDENCE ADDRESS:
;; ADDRESSEE: ABBOTT LABORATORIES D377/AP6D
;; STREET: 100 ABBOTT PARK ROAD
;; CITY: ABBOTT PARK
;; STATE: IL
;; COUNTRY: USA
;; ZIP: 60064-3500
;;
;; COMPUTER READABLE FORM:
;; MEDIUM TYPE: Floppy disk
;; COMPUTER: IBM PC compatible
;; OPERATING SYSTEM: PC-DOS/MS-DOS
;; SOFTWARE: PatentIn Release #1.0, Version #1.25
;; CURRENT APPLICATION DATA:
;; APPLICATION NUMBER: US/08/467,344A
;; FILING DATE: 07-Jun-1995
;; CLASSIFICATION: <Unknown>
;;
;; PRIOR APPLICATION DATA:
;; APPLICATION NUMBER: 08/424,550
;; FILING DATE: <Unknown>
;; ATTORNEY/AGENT INFORMATION:
;; NAME: FOREMSKI, PRISCILLA E.
;; REGISTRATION NUMBER: 33,207
;; REFERENCE/DOCKET NUMBER: 5527.PC.01
;; TELECOMMUNICATION INFORMATION:
;; TELEPHONE: 708-937-6365
;; TELEFAX: 708-938-2623
;;
;; INFORMATION FOR SEQ ID NO: 22:
;; SEQUENCE CHARACTERISTICS:
;; LENGTH: 737 base pairs
;; TYPE: nucleic acid
;; STRANDEDNESS: single
;; TOPOLOGY: linear
;; MOLECULE TYPE: DNA (genomic)
;; SEQUENCE DESCRIPTION: SEQ ID NO: 22:
US-08-467-344A-22

Query Match 100.0%; Score 10; DB 4; Length 737;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 296 CGAACGTTTCG 305

RESULT 90
US-08-467-344A-22/c
; Sequence 22, Application US/08467344A
; Patent No. 6586568
; GENERAL INFORMATION:
; APPLICANT: JOHN N. SIMONS
; TAMI J. PILOT-MATIAS
; GEORGE J. DAWSON
; GEORGE G. SCHLAUDER
; SURESH M. DESAI
; THOMAS P. LEARY
; ANTHONY SCOTT MUERHOFF
; JAMES C. ERKER
; SHERI L. BUIJK
; ISA K. MUSHAWAR
; TITLE OF INVENTION: NON-A, NON-B, NON-C, NON-D, NON-E HEPATITIS
; REAGENTS AND METHODS FOR THEIR USE
; NUMBER OF SEQUENCES: 716
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: ABBOTT LABORATORIES D377/AP6D
; STREET: 100 ABBOTT PARK ROAD
; CITY: ABBOTT PARK
; STATE: IL
; COUNTRY: USA
; ZIP: 60064-3500

;; COMPUTER READABLE FORM:
;; MEDIUM TYPE: Floppy disk
;; COMPUTER: IBM PC compatible
;; OPERATING SYSTEM: PC-DOS/MS-DOS
;; SOFTWARE: PatentIn Release #1.0, Version #1.25
;; CURRENT APPLICATION DATA:
;; APPLICATION NUMBER: US/08/467,344A
;; FILING DATE: 07-Jun-1995
;; CLASSIFICATION: <Unknown>
;;
;; PRIOR APPLICATION DATA:
;; APPLICATION NUMBER: 08/424,550
;; FILING DATE: <Unknown>
;; ATTORNEY/AGENT INFORMATION:
;; NAME: FOREMSKI, PRISCILLA E.
;; REGISTRATION NUMBER: 33,207
;; REFERENCE/DOCKET NUMBER: 5527.PC.01
;; TELECOMMUNICATION INFORMATION:
;; TELEPHONE: 708-937-6365
;; TELEFAX: 708-938-2623
;;
;; INFORMATION FOR SEQ ID NO: 22:
;; SEQUENCE CHARACTERISTICS:
;; LENGTH: 737 base pairs
;; TYPE: nucleic acid
;; STRANDEDNESS: single
;; TOPOLOGY: linear
;; MOLECULE TYPE: DNA (genomic)
;; SEQUENCE DESCRIPTION: SEQ ID NO: 22:
US-08-467-344A-22

Query Match 100.0%; Score 10; DB 4; Length 737;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 305 CGAACGTTTCG 296

RESULT 91
US-08-424-550B-22
; Sequence 22, Application US/08424550B
; Patent No. 6720166
; GENERAL INFORMATION:
; APPLICANT: JOHN N. SIMONS
; TAMI J. PILOT-MATIAS
; GEORGE J. DAWSON
; GEORGE G. SCHLAUDER
; SURESH M. DESAI
; THOMAS P. LEARY
; ANTHONY SCOTT MUERHOFF
; JAMES C. ERKER
; SHERI L. BUIJK
; ISA K. MUSHAWAR
; TITLE OF INVENTION: NON-A, NON-B, NON-C, NON-D, NON-E HEPATITIS
; REAGENTS AND METHODS FOR THEIR USE
; NUMBER OF SEQUENCES: 716
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: ABBOTT LABORATORIES D377/AP6D
; STREET: 100 ABBOTT PARK ROAD
; CITY: ABBOTT PARK
; STATE: IL
; COUNTRY: USA
; ZIP: 60064-3500
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/424,550B
; FILING DATE:
; CLASSIFICATION: 435435
; ATTORNEY/AGENT INFORMATION:

NAME: POREMSKI, PRISCILLA E.
REGISTRATION NUMBER: 33,207
REFERENCE/DOCKET NUMBER: 5527.PC.01
TELECOMMUNICATION INFORMATION:
TELEPHONE: 708-937-6365
TELEFAX: 708-938-2623
INFORMATION FOR SEQ ID NO: 22:
SEQUENCE CHARACTERISTICS:
LENGTH: 737 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
US-08-424-550B-22

Query Match 100.0%; Score 10; DB 4; Length 737;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 296 CGAACGTTTCG 305

RESULT 92

US-08-424-550B-22/c
Sequence 22, Application US/08424550B
Patent No. 6720166

GENERAL INFORMATION:
APPLICANT: JOHN N. SIMONS
APPLICANT: TAMI J. PILOT-MATIAS
APPLICANT: GEORGE J. DAWSON
APPLICANT: GEORGE G. SCHLAUDER
APPLICANT: SURESH M. DESAI
APPLICANT: THOMAS P. LEARY
APPLICANT: ANTHONY SCOTT MUEHRHOFF
APPLICANT: JAMES C. ERKER
APPLICANT: SHERI L. RUIJK
APPLICANT: ISA K. MUSHAWAR
TITLE OF INVENTION: NON-A, NON-B, NON-C, NON-D, NON-E HEPATITIS
TITLE OF INVENTION: REAGENTS AND METHODS FOR THEIR USE
NUMBER OF SEQUENCES: 716
CORRESPONDENCE ADDRESS:
ADDRESSEE: ABBOTT LABORATORIES D377/AP6D
STREET: 100 ABBOTT PARK ROAD
CITY: ABBOTT PARK
STATE: IL
COUNTRY: USA
ZIP: 60064-3500

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/424,550B
FILING DATE:
CLASSIFICATION: 435435
ATTORNEY/AGENT INFORMATION:
NAME: POREMSKI, PRISCILLA E.
REGISTRATION NUMBER: 33,207
REFERENCE/DOCKET NUMBER: 5527.PC.01
TELECOMMUNICATION INFORMATION:
TELEPHONE: 708-937-6365
TELEFAX: 708-938-2623
INFORMATION FOR SEQ ID NO: 22:
SEQUENCE CHARACTERISTICS:
LENGTH: 737 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: DNA (genomic)
US-08-424-550B-22

Query Match 100.0%; Score 10; DB 4; Length 737;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 305 CGAACGTTTCG 296

RESULT 93

US-09-107-532A-1566
Sequence 1566, Application US/09107532A
Patent No. 6583275

GENERAL INFORMATION:
APPLICANT: Lynn A Doucette-Stamm and David Bush
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO
ENTEROCOCCUS FAECIUM FOR DIAGNOSTICS AND THERAPEUTICS
NUMBER OF SEQUENCES: 7310

CORRESPONDENCE ADDRESS:
ADDRESSEE: GENOME THERAPEUTICS CORPORATION
STREET: 100 Beaver Street
CITY: Waltham
STATE: Massachusetts
COUNTRY: USA
ZIP: 02354

COMPUTER READABLE FORM:
MEDIUM TYPE: CD/ROM ISO9660
COMPUTER: PC
OPERATING SYSTEM: <Unknown>
SOFTWARE: ASCII

CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/107,532A
FILING DATE: 30-Jun-1998

PRIOR APPLICATION DATA:
APPLICATION NUMBER: 60/085,598
FILING DATE: 14 May 1998
APPLICATION NUMBER: 60/051571

FILING DATE: July 2, 1997
ATTORNEY/AGENT INFORMATION:
NAME: Ariniello, Pamela Deneke

REGISTRATION NUMBER: 40,489
REFERENCE/DOCKET NUMBER: GTC-012
TELECOMMUNICATION INFORMATION:
TELEPHONE: (781)893-5007

TELEFAX: (781)893-8277
INFORMATION FOR SEQ ID NO: 1566:
SEQUENCE CHARACTERISTICS:

LENGTH: 813 base pairs
TYPE: nucleic acid
STRANDEDNESS: double
TOPOLOGY: circular
MOLECULE TYPE: DNA (genomic)
HYPOTHETICAL: NO
ANTI-SENSE: NO
ORIGINAL SOURCE:
ORGANISM: Enterococcus faecium

FEATURE:
NAME/KEY: misc feature
LOCATION: (B) LOCATION 1...813
SEQUENCE DESCRIPTION: SEQ ID NO: 1566:

US-09-107-532A-1566

Query Match 100.0%; Score 10; DB 4; Length 813;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 243 CGAACGTTTCG 252

RESULT 94

US-09-107-532A-1566/c
; Sequence 1566, Application US/09107532A
; Patent No. 6583275
; GENERAL INFORMATION:
; APPLICANT: Lynn A Doucette-Stamm and David Bush
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO
; ENTEROCOCCUS FAECIUM FOR DIAGNOSTICS AND THERAPEUTICS
; NUMBER OF SEQUENCES: 7310
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: GENOME THERAPEUTICS CORPORATION
; STREET: 100 Beaver Street
; CITY: Waltham
; STATE: Massachusetts
; COUNTRY: USA
; ZIP: 02354
; COMPUTER READABLE FORM:
; MEDIUM TYPE: CD-ROM ISO9660
; COMPUTER: PC
; OPERATING SYSTEM: <unknown>
; SOFTWARE: ASCII
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/107,532A
; FILING DATE: 30-Jun-1998
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 60/085,598
; FILING DATE: 14 May 1998
; APPLICATION NUMBER: 60/051571
; FILING DATE: July 2, 1997
; ATTORNEY/AGENT INFORMATION:
; NAME: Ariniello, Pamela Deneke
; REGISTRATION NUMBER: 40,489
; REFERENCE/DOCKET NUMBER: GTC-012
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (781)893-5007
; TELEFAX: (781)893-8277
; INFORMATION FOR SEQ ID NO: 1566:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 813 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: circular
; MOLECULE TYPE: DNA (genomic)
; HYPOTHETICAL: NO
; ANTI-SENSE: NO
; ORIGINAL SOURCE:
; ORGANISM: Enterococcus faecium
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (B) LOCATION 1...813
; SEQUENCE DESCRIPTION: SEQ ID NO: 1566:
US-09-107-532A-1566
Query Match 100.0%; Score 10; DB 4; Length 813;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 CGAACGTTTCG 10
Db 252 CGAACGTTTCG 243
RESULT 95
US-08-776-251-10
; Sequence 10, Application US/08776251
; Patent No. 6025340
; GENERAL INFORMATION:
; APPLICANT: Springer, Caroline J
; APPLICANT: Marais, Richard
; TITLE OF INVENTION: Surface expression of enzyme in gene directed prodrug therapy
; NUMBER OF SEQUENCES: 27
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Nixon & Vanderhye
; STREET: 1100 No. 6025340th Glebe Road, 8th Floor
; CITY: Arlington
; STATE: Virginia
; COUNTRY: USA
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.25 (EPO)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/776,251
; FILING DATE: 31-JAN-1997
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: PCT/GB95/01782
; FILING DATE: 27-JUL-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: GB 9415167.7
; FILING DATE: 27-JUL-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Arthur R. Crawford
; REGISTRATION NUMBER: 25,327
; REFERENCE/DOCKET NUMBER: 620-20
; INFORMATION FOR SEQ ID NO: 10:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 816 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: cDNA
US-08-776-251-10

CITY: Arlington
STATE: Virginia
COUNTRY: USA
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25 (EPO)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/776,251
FILING DATE: 31-JAN-1997
PRIOR APPLICATION DATA:
APPLICATION NUMBER: PCT/GB95/01782
FILING DATE: 27-JUL-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: GB 9415167.7
FILING DATE: 27-JUL-1994
ATTORNEY/AGENT INFORMATION:
NAME: Arthur R. Crawford
REGISTRATION NUMBER: 25,327
REFERENCE/DOCKET NUMBER: 620-20
INFORMATION FOR SEQ ID NO: 10:
SEQUENCE CHARACTERISTICS:
LENGTH: 816 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: cDNA
US-08-776-251-10
Query Match 100.0%; Score 10; DB 3; Length 816;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 CGAACGTTTCG 10
Db 620 CGAACGTTTCG 629
RESULT 96
US-08-776-251-10/c
; Sequence 10, Application US/08776251
; Patent No. 6025340
; GENERAL INFORMATION:
; APPLICANT: Springer, Caroline J
; APPLICANT: Marais, Richard
; TITLE OF INVENTION: Surface expression of enzyme in gene directed prodrug therapy
; NUMBER OF SEQUENCES: 27
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Nixon & Vanderhye
; STREET: 1100 No. 6025340th Glebe Road, 8th Floor
; CITY: Arlington
; STATE: Virginia
; COUNTRY: USA
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.25 (EPO)
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/776,251
; FILING DATE: 31-JAN-1997
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: PCT/GB95/01782
; FILING DATE: 27-JUL-1995
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: GB 9415167.7
; FILING DATE: 27-JUL-1994
; ATTORNEY/AGENT INFORMATION:
; NAME: Arthur R. Crawford
; REGISTRATION NUMBER: 25,327
; REFERENCE/DOCKET NUMBER: 620-20
; INFORMATION FOR SEQ ID NO: 10:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 816 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: cDNA
US-08-776-251-10

SEQUENCE CHARACTERISTICS:
 LENGTH: 816 base pairs
 TYPE: nucleic acid
 STRANDEDNESS: single
 TOPOLOGY: linear
 MOLECULE TYPE: cdna
 US-08-776-251-10

Query Match 100.0%; Score 10; DB 3; Length 816;
 Best Local Similarity 100.0%; Pred. No. 1.2e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
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 Db 800 CGAACGTTTCG 791

RESULT 97

US-08-998-416-537
 ; Sequence 537, Application US/08998416
 ; Patent No. 6239264

GENERAL INFORMATION:
 APPLICANT: Philippsen, Peter
 APPLICANT: Pohlmann, Rainer
 APPLICANT: Steiner, Sabine
 APPLICANT: Mohr, Christine
 APPLICANT: Wendland, Jurgan
 APPLICANT: Knechtle, Philipp
 APPLICANT: Reibischung, Corinne
 TITLE OF INVENTION: GENOMIC DNA SEQUENCES OF ASHBYA GOSSYPHII
 TITLE OF INVENTION: AND USES THEREOF
 NUMBER OF SEQUENCES: 1152
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: No. 6239264artis Corporation
 STREET: 3054 Cornwallis Road
 CITY: Research Triangle Park
 STATE: No. 6239264th Carolina
 COUNTRY: USA
 ZIP: 27709

COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: PatentIn Release #1.0, Version #1.30
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/998,416
 FILING DATE: 24-DEC-1997
 CLASSIFICATION: 435
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: CH 0016/97
 FILING DATE: 31-DEC-1996

ATTORNEY/AGENT INFORMATION:
 NAME: Meigs, J. Timothy
 REGISTRATION NUMBER: 38,241
 REFERENCE/DOCKET NUMBER: PF/5-30306/A/CGC1976
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: 919-541-8587
 TELEFAX: 919-541-8689
 INFORMATION FOR SEQ ID NO: 537:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 856 base pairs
 TYPE: nucleic acid
 STRANDEDNESS: single
 TOPOLOGY: linear
 MOLECULE TYPE: DNA (genomic)
 ORIGINAL SOURCE:
 ORGANISM: PAG1374UP
 US-08-998-416-537

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 Best Local Similarity 100.0%; Pred. No. 1.2e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
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 Db 564 CGAACGTTTCG 573

RESULT 98

US-08-998-416-537/c
 ; Sequence 537, Application US/08998416
 ; Patent No. 6239264

GENERAL INFORMATION:
 APPLICANT: Philippsen, Peter
 APPLICANT: Pohlmann, Rainer
 APPLICANT: Steiner, Sabine
 APPLICANT: Mohr, Christine
 APPLICANT: Wendland, Jurgan
 APPLICANT: Knechtle, Philipp
 APPLICANT: Reibischung, Corinne
 TITLE OF INVENTION: GENOMIC DNA SEQUENCES OF ASHBYA GOSSYPHII
 TITLE OF INVENTION: AND USES THEREOF
 NUMBER OF SEQUENCES: 1152
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: No. 6239264artis Corporation
 STREET: 3054 Cornwallis Road
 CITY: Research Triangle Park
 STATE: No. 6239264th Carolina
 COUNTRY: USA
 ZIP: 27709

COMPUTER READABLE FORM:
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 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: PatentIn Release #1.0, Version #1.30
 CURRENT APPLICATION DATA:
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 FILING DATE: 24-DEC-1997
 CLASSIFICATION: 435
 PRIOR APPLICATION DATA:
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 FILING DATE: 31-DEC-1996

ATTORNEY/AGENT INFORMATION:
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 REGISTRATION NUMBER: 38,241
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 TELECOMMUNICATION INFORMATION:
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 TELEFAX: 919-541-8689
 INFORMATION FOR SEQ ID NO: 537:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 856 base pairs
 TYPE: nucleic acid
 STRANDEDNESS: single
 TOPOLOGY: linear
 MOLECULE TYPE: DNA (genomic)
 ORIGINAL SOURCE:
 ORGANISM: PAG1374UP
 US-08-998-416-537

Query Match 100.0%; Score 10; DB 3; Length 856;
 Best Local Similarity 100.0%; Pred. No. 1.2e+03;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
 |||||
 Db 573 CGAACGTTTCG 564

RESULT 99

US-09-270-767-10741
 ; Sequence 10741, Application US/09270767
 ; Patent No. 6703491

GENERAL INFORMATION:
 APPLICANT: Homburger et al.
 TITLE OF INVENTION: Nucleic acids and proteins of Drosophila melanogaster

; FILE REFERENCE: File Reference: 7326-094
; CURRENT APPLICATION NUMBER: US/09/270,767
; CURRENT FILING DATE: 1999-03-17
; NUMBER OF SEQ ID NOS: 62517
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 10741
; LENGTH: 964
; TYPE: DNA
; ORGANISM: Drosophila melanogaster
US-09-270-767-10741

Query Match 100.0%; Score 10; DB 4; Length 964;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
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Db 511 CGAACGTTTCG 520

RESULT 100
US-09-270-767-10741/c
; Sequence 10741, Application US/09270767
; Patent No. 6703491
; GENERAL INFORMATION:
; APPLICANT: Homburger et al.
; TITLE OF INVENTION: Nucleic acids and proteins of Drosophila melanogaster
; FILE REFERENCE: File Reference: 7326-094
; CURRENT APPLICATION NUMBER: US/09/270,767
; CURRENT FILING DATE: 1999-03-17
; NUMBER OF SEQ ID NOS: 62517
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 10741
; LENGTH: 964
; TYPE: DNA
; ORGANISM: Drosophila melanogaster
US-09-270-767-10741

Query Match 100.0%; Score 10; DB 4; Length 964;
Best Local Similarity 100.0%; Pred. No. 1.2e+03;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
| | | | | | | | | |
Db 520 CGAACGTTTCG 511

Search completed: June 30, 2005, 02:08:05
Job time : 71.5 secs

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GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.

OM nucleic - nucleic search, using sw model

Run on: June 29, 2005, 20:23:08 ; Search time 1720 Seconds
(without alignments)
221.304 Million cell updates/sec

Title: US-10-033-243-77

Perfect score: 10

Sequence: 1 cgaacttcg 10

Scoring table: IDENTITY NUC

Gapop 10.0 , Gapext 1.0

Searched: 34239544 seqs, 19032134700 residues

Total number of hits satisfying chosen parameters: 68479088

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 100 summaries

Database :

EST.*

1: gb_est1.*

2: gb_est2.*

3: gb_hic.*

4: gb_est3.*

5: gb_est4.*

6: gb_est5.*

7: gb_est6.*

8: gb_gssi.*

9: gb_gssi.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
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5	10	100.0	85	1	AA670169
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38	10	100.0	133	9	CG780524
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76	10	100.0	169	9	FR0044729
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85	10	100.0	180	8	BZ892989
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87	10	100.0	181	5	BX549081
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ALIGNMENTS

RESULT 1
 CF304811
 LOCUS
 DEFINITION ABF1--06-A03.g1 ABF3-overexpressing transgenic rice lambda phage
 cDNA library (ABF1) Oryza sativa (japonica cultivar-group) cDNA
 clone ABF1--06-A03, mRNA sequence.

ACCESSION
 VERSION CF304811.1 GI:33676572

KEYWORDS
 EST.

SOURCE
 Oryza sativa (japonica cultivar-group)

ORGANISM
 Oryza sativa (japonica cultivar-group)
 Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
 Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae;
 Ehrhartoideae; Oryzaceae; Oryza.

REFERENCE
 1 (bases 1 to 46)

AUTHORS
 Kim, J.S., Jun, K.M., Cheong, P.J., Kim, M.J., Lee, T.H., Shin, Y.C.,

Song, S.I., Kim, J.K., Kim, Y.-K. and Nahm, B.H.

Large-scale Sequencing Analysis of Rice ESTs

Unpublished (2003)

Contact: Nahm B.H.

Genomics and Genetics Institute, GreenGene Biotech Inc.; Division

of Bioscience and Bioinformatics, Myongji University

Yongin, Gyeonggi, Korea

Tel: 82 31 330 6193

Fax: 82 31 321 6355

Email: bhnahm@bio.com, bhnahm@bio.myongji.ac.kr.

Location/Qualifiers

1..46

/organism="Oryza sativa (japonica cultivar-group)"

/mol_type="mRNA"

/cultivar="Nackdong"

/db_xref="taxon:39947"

/clone="ABF1--06-A03"

/tissue_type="leaf"

/dev_stage="14 days after germination"

/lab_host="E.coli SOLR"

/clone_lib="ABF3-overexpressing transgenic rice lambda

phage cDNA library (ABF1)"

/note="Vector: pBluescript SK(+); Site 1: EcoRI; Site 2:

XhoI; Leaf was dried for 2hrs. cDNA was inserted into

lambda Uni-ZAP XR vector at 5' end with EcoRI and 3' end

with XhoI site. mRNA was prepared from ABA-responsive

element binding transcription factor 3 overexpression

line."

ORIGIN

Query Match 100.0%; Score 10; DB 7; Length 46;

Best Local Similarity 100.0%; Pred. No. 1.1e+04;

Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10

|||||

19 CGAACGTTTCG 28

RESULT 2

CF304811/c

LOCUS

DEFINITION ABF1--06-A03.g1 ABF3-overexpressing transgenic rice lambda phage

cDNA library (ABF1) Oryza sativa (japonica cultivar-group) cDNA

clone ABF1--06-A03, mRNA sequence.

ACCESSION

VERSION CF304811

KEYWORDS

EST.

SOURCE

Oryza sativa (japonica cultivar-group)

ORGANISM

Oryza sativa (japonica cultivar-group)

Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;

Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae;

Ehrhartoideae; Oryzaceae; Oryza.

REFERENCE

AUTHORS

1 (bases 1 to 46)

TITLE

JOURNAL

COMMENT

Unpublished (2003)

Contact: Nahm B.H.

Genomics and Genetics Institute, GreenGene Biotech Inc.; Division

of Bioscience and Bioinformatics, Myongji University

Yongin, Gyeonggi, Korea

Tel: 82 31 330 6193

Fax: 82 31 321 6355

Email: bhnahm@bio.com, bhnahm@bio.myongji.ac.kr.

Location/Qualifiers

1..46

/organism="Oryza sativa (japonica cultivar-group)"

/mol_type="mRNA"

/cultivar="Nackdong"

/db_xref="taxon:39947"

/clone="ABF1--06-A03"

/tissue_type="leaf"

/dev_stage="14 days after germination"

/lab_host="E.coli SOLR"

/clone_lib="ABF3-overexpressing transgenic rice lambda

phage cDNA library (ABF1)"

/note="Vector: pBluescript SK(+); Site 1: EcoRI; Site 2:

XhoI; Leaf was dried for 2hrs. cDNA was inserted into

lambda Uni-ZAP XR vector at 5' end with EcoRI and 3' end

with XhoI site. mRNA was prepared from ABA-responsive

element binding transcription factor 3 overexpression

line."

ORIGIN

Query Match 100.0%; Score 10; DB 7; Length 46;

Best Local Similarity 100.0%; Pred. No. 1.1e+04;

Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10

|||||

28 CGAACGTTTCG 19

RESULT 3

BI550536

LOCUS

DEFINITION

BI550536

VERSION

BI550536.1

KEYWORDS

EST.

SOURCE

ORGANISM

Homo sapiens (human)

Homo sapiens

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Mammalia; Eutheria; Primates; Catarrhini; Homnidae; Homo.

REFERENCE

AUTHORS

1 (bases 1 to 60)

TITLE

JOURNAL

COMMENT

Unpublished (1999)

Contact: Robert Strausberg, Ph.D.

Tissue Procurement: Miklos Falkovits, M.D., Ph.D.

cDNA Library Preparation: Michael J. Brownstein (NHGRI), Shiraki

Toshiyuki and Piero Carninci (RIKEN)

cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)

DNA Sequencing by: Incyte Genomics, Inc.

Clone distribution: MGC clone distribution information can be

found through the I.M.A.G.E. Consortium/LLNL at:

http://image.llnl.gov

Plate: LLAM11694 row: i column: 16

High quality sequence stop: 60.

Oryza sativa (japonica cultivar-group)

Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;

Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae;

Ehrhartoideae; Oryzaceae; Oryza.

1 (bases 1 to 46)

Kim, J.S., Jun, K.M., Cheong, P.J., Kim, M.J., Lee, T.H., Shin, Y.C.,

Song, S.I., Kim, J.K., Kim, Y.-K. and Nahm, B.H.

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Unpublished (2003)

Contact: Nahm B.H.

Genomics and Genetics Institute, GreenGene Biotech Inc.; Division

of Bioscience and Bioinformatics, Myongji University

Yongin, Gyeonggi, Korea

Tel: 82 31 330 6193

Fax: 82 31 321 6355

Email: bhnahm@bio.com, bhnahm@bio.myongji.ac.kr.

Location/Qualifiers

1..46

/organism="Oryza sativa (japonica cultivar-group)"

/mol_type="mRNA"

/cultivar="Nackdong"

/db_xref="taxon:39947"

/clone="ABF1--06-A03"

/tissue_type="leaf"

/dev_stage="14 days after germination"

/lab_host="E.coli SOLR"

/clone_lib="ABF3-overexpressing transgenic rice lambda

phage cDNA library (ABF1)"

/note="Vector: pBluescript SK(+); Site 1: EcoRI; Site 2:

XhoI; Leaf was dried for 2hrs. cDNA was inserted into

lambda Uni-ZAP XR vector at 5' end with EcoRI and 3' end

with XhoI site. mRNA was prepared from ABA-responsive

element binding transcription factor 3 overexpression

line."

ORIGIN

Query Match 100.0%; Score 10; DB 7; Length 46;

Best Local Similarity 100.0%; Pred. No. 1.1e+04;

Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10

|||||

28 CGAACGTTTCG 19

BI550536

LOCUS

DEFINITION

BI550536

VERSION

BI550536.1

KEYWORDS

EST.

SOURCE

ORGANISM

Homo sapiens (human)

Homo sapiens

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Mammalia; Eutheria; Primates; Catarrhini; Homnidae; Homo.

REFERENCE

AUTHORS

1 (bases 1 to 60)

TITLE

JOURNAL

COMMENT

Unpublished (1999)

Contact: Robert Strausberg, Ph.D.

Tissue Procurement: Miklos Falkovits, M.D., Ph.D.

cDNA Library Preparation: Michael J. Brownstein (NHGRI), Shiraki

Toshiyuki and Piero Carninci (RIKEN)

cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)

DNA Sequencing by: Incyte Genomics, Inc.

Clone distribution: MGC clone distribution information can be

found through the I.M.A.G.E. Consortium/LLNL at:

http://image.llnl.gov

Plate: LLAM11694 row: i column: 16

High quality sequence stop: 60.

FEATURES
source

Location/Qualifiers
1. .60
/organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/clone="IMAGE:5275095"
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/lab_host="DH10B"
/clone_lib="NIH_MGC_95"
/note="Organ: brain; Vector: pBluescriptR (modified pBluescript KS+); Site 1: BamHI; Site 2: SalI-XhoI (gtcgag); Oligo-dT primed using primer 5'-TTTTTTTTTTTTTTVN-3', size-selected for average insert size 2.5 kb and normalized to ROT 5. This is a primary library enriched for full-length clones and constructed using the Cap-trapper method (Carninci, in preparation). Library constructed by M. Brownstein (NIMH/NHGRI, National Institutes of Health). Note: this is a NIH_MGC Library."

ORIGIN

Query Match 100.0%; Score 10; DB 4; Length 60;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
|||||
Db 41 CGAACGTTTCG 50

RESULT 4
BI550536/c

LOCUS 603195461P1 NIH_MGC_95 Homo sapiens cDNA clone IMAGE:5275095 5',
DEFINITION mRNA sequence.
ACCESSION BI550536
VERSION BI550536.1 GI:15437848
KEYWORDS EST.
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens

REFERENCE
AUTHORS

TITLE NIH-MGC http://mgc.nci.nih.gov/.
JOURNAL National Institutes of Health, Mammalian Gene Collection (MGC)
COMMENT Unpublished (1999)
Contact: Robert Straubeberg, Ph.D.
Email: cga@remail.nih.gov

Tissue Procurement: Miklos Palkovits, M.D., Ph.D.
cDNA Library Preparation: Michael J. Brownstein (NHGRI), Shiraki Toshiyuki and Piero Carninci (RIKEN)
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
Plate: LLAM1694 Row: i Column: 16
High quality sequence stop: 60.

FEATURES
source

Location/Qualifiers
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constructed using the Cap-trapper method (Carninci, in preparation). Library constructed by M. Brownstein (NIMH/NHGRI, National Institutes of Health). Note: this is a NIH_MGC Library."

Query Match 100.0%; Score 10; DB 4; Length 60;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
|||||
Db 50 CGAACGTTTCG 41

RESULT 5

LOCUS AA670169
DEFINITION AA670169 85 bp mRNA linear EST 20-NOV-1997
IMAGE:845673 3' similar to TR:E196749 E196749 MRNA; EXPRESSED
SEQUENCE TAG ; mRNA sequence.

ACCESSION AA670169
VERSION AA670169.1 GI:2631668
KEYWORDS EST.
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens

REFERENCE Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Homnidae; Homo.
AUTHORS Hillier, L., Allen, M., Bowles, L., Dubuque, T., Geisel, G., Jost, S., Krizman, D., Kucaba, T., Lacy, M., Le, N., Lennon, G., Marra, M., Martin, J., Moore, B., Schellenger, K., Steptoe, M., Tan, F., Theising, B., White, Y., Wylie, T., Waterston, R. and Wilson, R.

TITLE WashU-NCI human EST Project
JOURNAL Unpublished (1997)
COMMENT Contact: Wilson RK

Washington University School of Medicine
4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108
Tel: 314 286 1800
Fax: 314 286 1810
Email: est@watson.wustl.edu
This clone is available royalty-free through LLNL; contact the IMAGE Consortium (info@image.llnl.gov) for further information.
Trace considered overall poor quality
Possible reversed clone: similarity on wrong strand
Seq primer: -40m13 fwd. ET from Amersham
High quality sequence stop: 1.
Location/Qualifiers
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FEATURES
source

Location/Qualifiers
1. .85
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/cell_line="NCI-H69"
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/lab_host="SOLR (kanamycin resistant)"
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ORIGIN

Query Match 100.0%; Score 10; DB 1; Length 85;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
|||||
Db 66 CGAACGTTTCG 75

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RESULT 6
AA670169/c
LOCUS
DEFINITION
  ab65405.s1 Stratagene lung carcinoma 937218 Homo sapiens cDNA clone
  IMAGE:845673 3' similar to TR:E196749 E196749 MRNA; EXPRESSED
SEQUENCE TAG ;, mRNA sequence.
ACCESSION
  AA670169
KEYWORDS
  EST.
SOURCE
  AA670169.1 GI:2631668
  Homo sapiens (human)
ORGANISM
  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
  Mammalia; Eutheria; Primates; Catarhini; Homnidae; Homo.
REFERENCE
  1 (bases 1 to 85)
  Hillier,L., Allen,M., Bowles,L., Dubuque,T., Geisel,G., Jost,S.,
  Krizman,D., Kucaba,T., Lacy,M., Le,N., Lennon,G., Marra,M.,
  Martin,J., Moore,B., Schellenberg,K., Steptoe,M., Tan,F.,
  Theising,B., White,Y., Wylie,T., Waterston,R. and Wilson,R.
  WashU-NCI human EST Project
  Unpublished (1997)
TITLE
  WashU-NCI human EST Project
JOURNAL
  Unpublished (1997)
COMMENT
  Contact: Wilson RK
  Washington University School of Medicine
  4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108
  Tel: 314 286 1800
  Fax: 314 286 1810
  Email: est@watson.wustl.edu
  This clone is available royalty-free through LLNL ; contact the
  IMAGE Consortium (info@image.llnl.gov) for further information.
  Trace considered overall poor quality
  Possible reversed clone: similarity on wrong strand
  Seq primer: -40m13 fwd. ET from Amersham
  High quality sequence stop: 1.
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    /lab_host="SOLR (kanamycin resistant)"
    /clone_lib="Stratagene lung carcinoma 937218"
    /note="Organ: lung; Vector: pBluescript SK-; Site 1:
    EcoRI; Site 2: XhoI; Cloned unidirectionally. Primer:
    Oligo dT. Small cell carcinoma cell line NCI-H69. Average
    insert size: 1.0 kb; Uni-ZAP XR Vector; -5' adaptor
    sequence: 5' GAATTCGCGACGAG 3' -3' adaptor sequence: 5'
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FEATURES
  source
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    /mol_type="mRNA"
    /db_xref="taxon:9606"
    /clone="IMAGE:845673"
    /tissue_type="lung carcinoma"
    /cell_line="NCI-H69"
    /dev_stage="cell line NCI-H69"
    /lab_host="SOLR (kanamycin resistant)"
    /clone_lib="Stratagene lung carcinoma 937218"
    /note="Organ: lung; Vector: pBluescript SK-; Site 1:
    EcoRI; Site 2: XhoI; Cloned unidirectionally. Primer:
    Oligo dT. Small cell carcinoma cell line NCI-H69. Average
    insert size: 1.0 kb; Uni-ZAP XR Vector; -5' adaptor
    sequence: 5' GAATTCGCGACGAG 3' -3' adaptor sequence: 5'
    CTCGAGTTTTTTTTTTTTTTTTT 3'"
ORIGIN
  Query Match 100.0%; Score 10; DB 1; Length 85;
  Best Local Similarity 100.0%; Pred. No. 1.1e+04;
  Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

  Qy 1 CGAACGTTTCG 10
  |||||
  Db 66 CGAACGTTTCG 75

RESULT 7
AA629864
LOCUS
DEFINITION
  ad48h11.s1 Stratagene lung carcinoma 937218 Homo sapiens cDNA clone
  IMAGE:884997 3' similar to TR:E196749 E196749 MRNA; EXPRESSED
SEQUENCE TAG ;, mRNA sequence.
ACCESSION
  AA629864
KEYWORDS
  EST.
SOURCE
  AA629864.1 GI:2552475
  Homo sapiens (human)
ORGANISM
  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
  Mammalia; Eutheria; Primates; Catarhini; Homnidae; Homo.
REFERENCE
  1 (bases 1 to 85)
  Hillier,L., Allen,M., Bowles,L., Dubuque,T., Geisel,G., Jost,S.,
  Krizman,D., Kucaba,T., Lacy,M., Le,N., Lennon,G., Marra,M.,
  Martin,J., Moore,B., Schellenberg,K., Steptoe,M., Tan,F.,
  Theising,B., White,Y., Wylie,T., Waterston,R. and Wilson,R.
  WashU-NCI human EST Project
  Unpublished (1997)
TITLE
  WashU-NCI human EST Project
JOURNAL
  Unpublished (1997)
COMMENT
  Contact: Wilson RK
  Washington University School of Medicine
  4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108
  Tel: 314 286 1800
  Fax: 314 286 1810
  Email: est@watson.wustl.edu
  This clone is available royalty-free through LLNL ; contact the
  IMAGE Consortium (info@image.llnl.gov) for further information.
  Trace considered overall poor quality
  Possible reversed clone: similarity on wrong strand
  Seq primer: -40m13 fwd. ET from Amersham
  High quality sequence stop: 1.
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    /dev_stage="cell line NCI-H69"
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    sequence: 5' GAATTCGCGACGAG 3' -3' adaptor sequence: 5'
    CTCGAGTTTTTTTTTTTTTTTTT 3'"
ORIGIN
  Query Match 100.0%; Score 10; DB 1; Length 85;
  Best Local Similarity 100.0%; Pred. No. 1.1e+04;
  Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

  Qy 1 CGAACGTTTCG 10
  |||||
  Db 75 CGAACGTTTCG 66

RESULT 8
AA629864/c
LOCUS
DEFINITION
  ad48h11.s1 Stratagene lung carcinoma 937218 Homo sapiens cDNA clone
  IMAGE:884997 3' similar to TR:E196749 E196749 MRNA; EXPRESSED
SEQUENCE TAG ;, mRNA sequence.
ACCESSION
  AA629864
KEYWORDS
  EST.
SOURCE
  AA629864.1 GI:2552475
  Homo sapiens (human)
ORGANISM
  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
  Mammalia; Eutheria; Primates; Catarhini; Homnidae; Homo.
REFERENCE
  1 (bases 1 to 85)
  Hillier,L., Allen,M., Bowles,L., Dubuque,T., Geisel,G., Jost,S.,
  Krizman,D., Kucaba,T., Lacy,M., Le,N., Lennon,G., Marra,M.,
  Martin,J., Moore,B., Schellenberg,K., Steptoe,M., Tan,F.,
  Theising,B., White,Y., Wylie,T., Waterston,R. and Wilson,R.
  WashU-NCI human EST Project
  Unpublished (1997)
TITLE
  WashU-NCI human EST Project
JOURNAL
  Unpublished (1997)
COMMENT
  Contact: Wilson RK
  Washington University School of Medicine
  4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108
  Tel: 314 286 1800
  Fax: 314 286 1810
  Email: est@watson.wustl.edu
  This clone is available royalty-free through LLNL ; contact the
  IMAGE Consortium (info@image.llnl.gov) for further information.
  Trace considered overall poor quality
  Possible reversed clone: similarity on wrong strand
  Seq primer: -40m13 fwd. ET from Amersham
  High quality sequence stop: 1.
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    insert size: 1.0 kb; Uni-ZAP XR Vector; -5' adaptor
    sequence: 5' GAATTCGCGACGAG 3' -3' adaptor sequence: 5'
    CTCGAGTTTTTTTTTTTTTTTTT 3'"

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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarhini; Homnidae; Homo.
1 (bases 1 to 85)
Hillier,L., Allen,M., Bowles,L., Dubuque,T., Geisel,G., Jost,S.,
Krizman,D., Kucaba,T., Lacy,M., Le,N., Lennon,G., Marra,M.,
Martin,J., Moore,B., Schellenberg,K., Steptoe,M., Tan,F.,
Theising,B., White,Y., Wylie,T., Waterston,R. and Wilson,R.
WashU-NCI human EST Project
Unpublished (1997)
Contact: Wilson RK
Washington University School of Medicine
4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108
Tel: 314 286 1800
Fax: 314 286 1810
Email: est@watson.wustl.edu
This clone is available royalty-free through LLNL ; contact the
IMAGE Consortium (info@image.llnl.gov) for further information.
Trace considered overall poor quality
Possible reversed clone: similarity on wrong strand
Insert Length: 899 Std Error: 0.00
Seq primer: -40m13 fwd. ET from Amersham
High quality sequence stop: 1.
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  /cell_line="NCI-H69"
  /dev_stage="cell line NCI-H69"
  /lab_host="SOLR (kanamycin resistant)"
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  /note="Organ: lung; Vector: pBluescript SK-; Site 1:
  EcoRI; Site 2: XhoI; Cloned unidirectionally. Primer:
  Oligo dT. Small cell carcinoma cell line NCI-H69. Average
  insert size: 1.0 kb; Uni-ZAP XR Vector; -5' adaptor
  sequence: 5' GAATTCGCGACGAG 3' -3' adaptor sequence: 5'
  CTCGAGTTTTTTTTTTTTTTTTT 3'"
ORIGIN
  Query Match 100.0%; Score 10; DB 1; Length 85;
  Best Local Similarity 100.0%; Pred. No. 1.1e+04;
  Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

  Qy 1 CGAACGTTTCG 10
  |||||
  Db 66 CGAACGTTTCG 75

RESULT 8
AA629864/c
LOCUS
DEFINITION
  ad48h11.s1 Stratagene lung carcinoma 937218 Homo sapiens cDNA clone
  IMAGE:884997 3' similar to TR:E196749 E196749 MRNA; EXPRESSED
SEQUENCE TAG ;, mRNA sequence.
ACCESSION
  AA629864
KEYWORDS
  EST.
SOURCE
  AA629864.1 GI:2552475
  Homo sapiens (human)
ORGANISM
  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
  Mammalia; Eutheria; Primates; Catarhini; Homnidae; Homo.
REFERENCE
  1 (bases 1 to 85)
  Hillier,L., Allen,M., Bowles,L., Dubuque,T., Geisel,G., Jost,S.,
  Krizman,D., Kucaba,T., Lacy,M., Le,N., Lennon,G., Marra,M.,
  Martin,J., Moore,B., Schellenberg,K., Steptoe,M., Tan,F.,
  Theising,B., White,Y., Wylie,T., Waterston,R. and Wilson,R.
  WashU-NCI human EST Project
  Unpublished (1997)
TITLE
  WashU-NCI human EST Project
JOURNAL
  Unpublished (1997)
COMMENT
  Contact: Wilson RK
  Washington University School of Medicine
  4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108
  Tel: 314 286 1800
  Fax: 314 286 1810
  Email: est@watson.wustl.edu
  This clone is available royalty-free through LLNL ; contact the
  IMAGE Consortium (info@image.llnl.gov) for further information.
  Trace considered overall poor quality
  Possible reversed clone: similarity on wrong strand
  Seq primer: -40m13 fwd. ET from Amersham
  High quality sequence stop: 1.
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    /dev_stage="cell line NCI-H69"
    /lab_host="SOLR (kanamycin resistant)"
    /clone_lib="Stratagene lung carcinoma 937218"
    /note="Organ: lung; Vector: pBluescript SK-; Site 1:
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    Oligo dT. Small cell carcinoma cell line NCI-H69. Average
    insert size: 1.0 kb; Uni-ZAP XR Vector; -5' adaptor
    sequence: 5' GAATTCGCGACGAG 3' -3' adaptor sequence: 5'
    CTCGAGTTTTTTTTTTTTTTTTT 3'"

```

Tel: 314 286 1800
Fax: 314 286 1810

Email: est@watson.wustl.edu

This clone is available royalty-free through LLNL; contact the
IMAGE Consortium (info@image.llnl.gov) for further information.

Trace considered overall poor quality

Possible reversed clone: similarity on wrong strand

Insert length: 899 Std Error: 0.00

Seq primer: -40m13 fwd. ET from Amersham

High quality sequence stop: 1.

FEATURES

source

Location/Qualifiers
1..85
/organism="Homo sapiens"
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/tissue_type="lung carcinoma"
/cell_line="NCI-H69"
/dev_stage="cell line NCI-H69"
/lab_host="SOLR (kanamycin resistant)"
/clone_lib="Stratagene lung carcinoma 937218"
/note="Organ: lung; Vector: pBluescript SK-; Site 1:
EcoRI; Site 2: XhoI; Cloned unidirectionally, primer:
Oligo dT. Small cell carcinoma cell line NCI-H69. Average
insert size: 1.0 kb; Uni-ZAP XR Vector; ~5' adaptor
sequence: 5' GAATTCGGCAG 3' ~3' adaptor sequence: 5'
CTCGAGTTTTTTTTTTTTT 3'"

ORIGIN

Query Match 100.0%; Score 10; DB 1; Length 85;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10

Db 75 CGAACGTTTCG 66

RESULT 9

BE576515

LOCUS

DEFINITION BE576515 94 bp mRNA linear EST 15-AUG-2000
5', mRNA sequence. IMAGE:3399604

ACCESSION

VERSION

KEYWORDS

SOURCE

ORGANISM

Xenopus laevis (African clawed frog)
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Amphibia; Batrachia; Anura; Mesobatrachia; Pipidoidea; Pipidae;
Xenopodinae; Xenopus; Xenopus.

REFERENCE

AUTHORS

TITLE

JOURNAL

COMMENT

NCI-CCAP http://www.ncbi.nlm.nih.gov/ncicgap.
National Cancer Institute, Cancer Genome Anatomy Project (CGAP),
Tumor Gene Index
Unpublished (1997)
Other ESTs: dc40g03.x1
Contact: Robert Strausberg, Ph.D.
Email: cgapbs-remail.nih.gov
Tissue Procurement: Martha Rebbert, Steven L. Klein, Ph.D.
cDNA Library Preparation: Life Technologies, Inc.
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Washington University Genome Sequencing Center
Clone distribution: Xenopus clones from this library are available
through the I.M.A.G.E. Consortium/LLNL at: info@image.llnl.gov
Seq primer: -40RP from Gibco
High quality sequence stop: 83.

FEATURES

source

Location/Qualifiers
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/tissue_type="embryo (stages 24-25)"
/lab_host="DH10B (phage-resistant)"
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/note="Vector: pCMV-SPORT6; Site 1: NotI; Site 2: SalI;
Cloned unidirectionally, primer: Oligo dT. Average insert
size 1.7 kb. Constructed by Life Technologies. Note: This
is a Xenopus Gene Collection (XGC) library."

ORIGIN

Query Match 100.0%; Score 10; DB 2; Length 94;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10

Db 70 CGAACGTTTCG 79

RESULT 10

BE576515/c

LOCUS

DEFINITION BE576515 94 bp mRNA linear EST 15-AUG-2000
5', mRNA sequence. IMAGE:3399604

ACCESSION

VERSION

KEYWORDS

SOURCE

ORGANISM

Xenopus laevis (African clawed frog)
Xenopus laevis
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Amphibia; Batrachia; Anura; Mesobatrachia; Pipidoidea; Pipidae;
Xenopodinae; Xenopus; Xenopus.

REFERENCE

AUTHORS

TITLE

JOURNAL

COMMENT

NCI-CCAP http://www.ncbi.nlm.nih.gov/ncicgap.
National Cancer Institute, Cancer Genome Anatomy Project (CGAP),
Tumor Gene Index
Unpublished (1997)
Other ESTs: dc40g03.x1
Contact: Robert Strausberg, Ph.D.
Email: cgapbs-remail.nih.gov
Tissue Procurement: Martha Rebbert, Steven L. Klein, Ph.D.
cDNA Library Preparation: Life Technologies, Inc.
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Washington University Genome Sequencing Center
Clone distribution: Xenopus clones from this library are available
through the I.M.A.G.E. Consortium/LLNL at: info@image.llnl.gov
Seq primer: -40RP from Gibco
High quality sequence stop: 83.

FEATURES

source

Location/Qualifiers
1..94
/organism="Xenopus laevis"
/mol_type="mRNA"
/db_xref="taxon:8355"
/clone="IMAGE:3399604"
/tissue_type="embryo (stages 24-25)"
/lab_host="DH10B (phage-resistant)"
/clone_lib="NICHD XGC Emb3"
/note="Vector: pCMV-SPORT6; Site 1: NotI; Site 2: SalI;
Cloned unidirectionally, primer: Oligo dT. Average insert
size 1.7 kb. Constructed by Life Technologies. Note: This
is a Xenopus Gene Collection (XGC) library."

ORIGIN

Query Match 100.0%; Score 10; DB 2; Length 94;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10

Db 79 CGAACGTTTCG 70

RESULT 11

CV019946

LOCUS
 DEFINITION tbt_009611 Normalized Nicotiana tabacum cDNA library EST 19-AUG-2004
 tabacum cDNA clone tbt_009611 5', mRNA sequence.
 ACCESSION CV019946
 VERSION CV019946.1 GI:51461454
 KEYWORDS EST.
 SOURCE Nicotiana tabacum (common tobacco)
 ORGANISM Nicotiana tabacum
 Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; asterids; lamids; Solanales; Solanaceae; Nicotiana.
 REFERENCE 1 (bases 1 to 103)
 AUTHORS Li, W.Z., Shao, Y., Li, Y.P., Lu, X.P., Montero, D.C., Alvarez, S.P., Deng, Y., Jin, Q.C., Wang, S., Dai, C.E., Zeng, Z.L., Wang, Y.Q., Dong, H.T. and Li, D.B.
 TITLE Large-scale identification of ESTs from Nicotiana tabacum by normalized cDNA library sequencing
 JOURNAL Unpublished (2004)
 COMMENT Contact: Wenzheng Li, Yan Shao, Yongping Li, Xiuping Lu, Limin Song, Haitao Dong, Debao Li
 The Tobacco Science Research Institute of Yunnan Province; Yunnan Provincial Tobacco Group Dali Branch; Bioinformatics and Gene Network Research Group, Zhejiang University
 The Tobacco Science Research Institute of Yunnan Province, Yuxi 653100, China
 Email: webmaster@estarray.org, URL: http://www.estarray.org
 Only the high quality region of sequence was submitted.
 Seq primer: M13.

FEATURES
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 Location/Qualifiers
 1..103
 /organism="Nicotiana tabacum"
 /mol_type="mRNA"
 /db_xref="taxon:4097"
 /clone="tbt_009611"
 /tissue_type="Mixed"
 /clone_lib="Normalized Nicotiana tabacum cDNA library"
 /note="Vector: pBS-SK+"

ORIGIN
 Query Match 100.0%; Score 10; DB 7; Length 103;
 Best Local Similarity 100.0%; Pred. No. 1.1e+04;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
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 Db 79 CGAACGTTTCG 88

RESULT 12
 LOCUS
 DEFINITION CV019946 103 bp mRNA linear EST 19-AUG-2004
 tabacum cDNA clone tbt_009611 5', mRNA sequence.
 ACCESSION CV019946
 VERSION CV019946.1 GI:51461454
 KEYWORDS EST.
 SOURCE Nicotiana tabacum (common tobacco)
 ORGANISM Nicotiana tabacum
 Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; asterids; lamids; Solanales; Solanaceae; Nicotiana.
 REFERENCE 1 (bases 1 to 103)
 AUTHORS Li, W.Z., Shao, Y., Li, Y.P., Lu, X.P., Montero, D.C., Alvarez, S.P., Deng, Y., Jin, Q.C., Wang, S., Dai, C.E., Zeng, Z.L., Wang, Y.Q., Dong, H.T. and Li, D.B.
 TITLE Large-scale identification of ESTs from Nicotiana tabacum by normalized cDNA library sequencing
 JOURNAL Unpublished (2004)
 COMMENT Contact: Wenzheng Li, Yan Shao, Yongping Li, Xiuping Lu, Limin Song, Haitao Dong, Debao Li
 The Tobacco Science Research Institute of Yunnan Province; Yunnan Provincial Tobacco Group Dali Branch; Bioinformatics and Gene Network Research Group, Zhejiang University

The Tobacco Science Research Institute of Yunnan Province, Yuxi 653100, China
 Email: webmaster@estarray.org, URL: http://www.estarray.org
 Only the high quality region of sequence was submitted.
 Seq primer: M13.

FEATURES
 Location/Qualifiers
 1..103
 /organism="Nicotiana tabacum"
 /mol_type="mRNA"
 /db_xref="taxon:4097"
 /clone="tbt_009611"
 /tissue_type="Mixed"
 /clone_lib="Normalized Nicotiana tabacum cDNA library"
 /note="Vector: pBS-SK+"

ORIGIN
 Query Match 100.0%; Score 10; DB 7; Length 103;
 Best Local Similarity 100.0%; Pred. No. 1.1e+04;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
 |||||
 Db 88 CGAACGTTTCG 79

RESULT 13
 LOCUS
 DEFINITION CNS09N54 108 bp mRNA linear HTC 08-JAN-2003
 Single read from an extremity of a full-length cDNA clone made from Anopheles gambiae total adult females. 5-PRIME end of clone PK0AAC5AH09 of strain 6-9 of Anopheles gambiae (African malaria mosquito).
 ACCESSION BX066068
 VERSION BX066068.1 GI:27639349
 KEYWORDS HTC.
 SOURCE Anopheles gambiae (African malaria mosquito)
 ORGANISM Anopheles gambiae
 Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota; Neoptera; Endopterygota; Diptera; Nematocera; Culicoidea;
 REFERENCE 1 (bases 1 to 108)
 AUTHORS Direct Submission
 TITLE Submitted (06-JAN-2003) Genoscope - Centre National de Sequencage : BP 191 91006 EVRY cedex - FRANCE (E-mail : sequef@genoscope.cns.fr - Web : www.genoscope.cns.fr)
 LOCATION/Qualifiers
 Location/Qualifiers
 1..108
 /organism="Anopheles gambiae"
 /mol_type="mRNA"
 /strain="6-9"
 /db_xref="taxon:7165"
 /clone="PK0AAC5AH09"
 /plasmid="pME18S-FL"
 /note="end : 5-PRIME"

FEATURES
 source
 Location/Qualifiers
 1..108
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 /mol_type="mRNA"
 /strain="6-9"
 /db_xref="taxon:7165"
 /clone="PK0AAC5AH09"
 /plasmid="pME18S-FL"
 /note="end : 5-PRIME"

ORIGIN
 Query Match 100.0%; Score 10; DB 3; Length 108;
 Best Local Similarity 100.0%; Pred. No. 1.1e+04;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
 |||||
 Db 52 CGAACGTTTCG 61

RESULT 14
 LOCUS
 DEFINITION CNS09N54/c 108 bp mRNA linear HTC 08-JAN-2003
 Single read from an extremity of a full-length cDNA clone made from Anopheles gambiae total adult females. 5-PRIME end of clone PK0AAC5AH09 of strain 6-9 of Anopheles gambiae (African malaria mosquito).

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ACCESSION      BX066068
VERSION         BX066068.1  GI:27639349
KEYWORDS        HTC
SOURCE          Anopheles gambiae (African malaria mosquito)
ORGANISM        Anopheles gambiae
                Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
                Neoptera; Endopterygota; Diptera; Nematocera; Culicoides;
                Anopheles.
REFERENCE       1 (bases 1 to 108)
AUTHORS         Direct Submission
TITLE           Submitted (06-JAN-2003) Genoscope - Centre National de Sequencage :
JOURNAL         BP 191 91006 EVRY cedex - FRANCE (E-mail : seqref@genoscope.cns.fr
                - Web : www.genoscope.cns.fr)
FEATURES       source
                1..108
                /organism="Anopheles gambiae"
                /mol_type="mRNA"
                /strain="6-9"
                /db_xref="taxon:7165"
                /clone="FK0AAC5AH09"
                /plasmid="pME18S-FL"
                /note="end : 5-PRIME"

ORIGIN
Query Match      100.0%; Score 10; DB 3; Length 108;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
    |||||
Db 61 CGAACGTTTCG 52

RESULT 15
LOCUS           BG009324
DEFINITION      RC1-GN0198-011200-023-g01 GN0198 Homo sapiens cDNA, mRNA sequence.
ACCESSION       BG009324
VERSION         BG009324.1  GI:12455231
KEYWORDS        EST.
SOURCE          Homo sapiens (human)
ORGANISM        Homo sapiens
                Eukaryota; Chordata; Craniata; Vertebrata; Euteleostomi;
                Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE       1 (bases 1 to 109)
AUTHORS         Dias Neto,E., Garcia Correa,R., Verjovski-Almeida,S., Briones,M.R.,
                Nagai,M.A., da Silva,W. Jr., Zago,M.A., Bordin,S., Costa,F.F.,
                Goldman,G.H., Carvalho,A.F., Matsukuma,A., Baia,G.S., Simpson,D.H.,
                Brunstein,A., deOliveira,P.S., Bucher,P., Jongeneel,C.V.,
                O'Hare,M.J., Soares,F., Brentani,R.R., Reis,L.F., de Souza,S.J. and
                Simpson,A.J.
TITLE           Shotgun sequencing of the human transcriptome with ORF expressed
                sequence tags
JOURNAL         Proc. Natl. Acad. Sci. U.S.A. 97 (7), 3491-3496 (2000)
MEDLINE        20202663
PUBMED         10737800
COMMENT         Contact: Simpson A.J.G.
                Laboratory of Cancer Genetics
                Ludwig Institute for Cancer Research
                Rua Prof. Antonio Prudente 109, 4 andar, 01509-010, Sao Paulo-SP,
                Brazil
                Tel: +55-11-2704922
                Fax: +55-11-2707001
                Email: asimpson@ludwig.org.br
                This sequence was derived from the FAPESP/LICR Human Cancer Genome
                Project. This entry can be seen in the following URL
                (http://www.ludwig.org.br/scripts/gethtml2.pl?tl=RC1&t2=RC1-GN0198-
                011200-023-g01&t3=2000-12-01&t4=1)
                Seq primer: puc 18 forward
                High quality sequence start: 15
                High quality sequence stop: 76.
                Location/Qualifiers

FEATURES       source
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                /organism="Homo sapiens"
                /mol_type="mRNA"
                /db_xref="taxon:9606"
                /dev_stage="Adult"
                /clone_lib="GN0198"
                /note="Organ: Placenta normal; Vector: puc18; Site_1:
                Smai; Site_2: Smai; A mini-library was made by cloning
                products derived from ORESTES PCR (U.S. Letters Patent
                application No. 196,716 - Ludwig Institute for Cancer

```

```

1..109
/organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/dev_stage="Adult"
/clone_lib="GN0198"
/note="Organ: Placenta normal; Vector: puc18; Site_1:
Smai; Site_2: Smai; A mini-library was made by cloning
products derived from ORESTES PCR (U.S. Letters Patent
application No. 196,716 - Ludwig Institute for Cancer
Research) profiles into the pUC 18 vector. Reverse
transcription of tissue mRNA and cDNA amplification were
performed under low stringency conditions."

ORIGIN
Query Match      100.0%; Score 10; DB 4; Length 109;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
    |||||
Db 35 CGAACGTTTCG 44

RESULT 16
LOCUS           BG009324/c
DEFINITION      RC1-GN0198-011200-023-g01 GN0198 Homo sapiens cDNA, mRNA sequence.
ACCESSION       BG009324
VERSION         BG009324.1  GI:12455231
KEYWORDS        EST.
SOURCE          Homo sapiens (human)
ORGANISM        Homo sapiens
                Eukaryota; Chordata; Craniata; Vertebrata; Euteleostomi;
                Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE       1 (bases 1 to 109)
AUTHORS         Dias Neto,E., Garcia Correa,R., Verjovski-Almeida,S., Briones,M.R.,
                Nagai,M.A., da Silva,W. Jr., Zago,M.A., Bordin,S., Costa,F.F.,
                Goldman,G.H., Carvalho,A.F., Matsukuma,A., Baia,G.S., Simpson,D.H.,
                Brunstein,A., deOliveira,P.S., Bucher,P., Jongeneel,C.V.,
                O'Hare,M.J., Soares,F., Brentani,R.R., Reis,L.F., de Souza,S.J. and
                Simpson,A.J.
TITLE           Shotgun sequencing of the human transcriptome with ORF expressed
                sequence tags
JOURNAL         Proc. Natl. Acad. Sci. U.S.A. 97 (7), 3491-3496 (2000)
MEDLINE        20202663
PUBMED         10737800
COMMENT         Contact: Simpson A.J.G.
                Laboratory of Cancer Genetics
                Ludwig Institute for Cancer Research
                Rua Prof. Antonio Prudente 109, 4 andar, 01509-010, Sao Paulo-SP,
                Brazil
                Tel: +55-11-2704922
                Fax: +55-11-2707001
                Email: asimpson@ludwig.org.br
                This sequence was derived from the FAPESP/LICR Human Cancer Genome
                Project. This entry can be seen in the following URL
                (http://www.ludwig.org.br/scripts/gethtml2.pl?tl=RC1&t2=RC1-GN0198-
                011200-023-g01&t3=2000-12-01&t4=1)
                Seq primer: puc 18 forward
                High quality sequence start: 15
                High quality sequence stop: 76.
                Location/Qualifiers

FEATURES       source
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                /organism="Homo sapiens"
                /mol_type="mRNA"
                /db_xref="taxon:9606"
                /dev_stage="Adult"
                /clone_lib="GN0198"
                /note="Organ: Placenta normal; Vector: puc18; Site_1:
                Smai; Site_2: Smai; A mini-library was made by cloning
                products derived from ORESTES PCR (U.S. Letters Patent
                application No. 196,716 - Ludwig Institute for Cancer

```

Research) profiles into the pUC 18 vector. Reverse transcription of tissue mRNA and cDNA amplification were performed under low stringency conditions."

ORIGIN

Query Match 100.0%; Score 10; DB 4; Length 109;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 44 CGAACGTTTCG 35

RESULT 17
FR0035679
LOCUS 111 bp DNA linear GSS 25-FEB-2004
DEFINITION Fugu rubripes GSS sequence, clone 019B02d36, genomic survey sequence.

ACCESSION AL123196
VERSION AL123196.1 GI:6104811
KEYWORDS GSS; genome survey sequence.
SOURCE Takifugu rubripes (Fugu rubripes)
ORGANISM Takifugu rubripes
Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei;
Acanthomorpha; Acanthopterygii; Percomorpha; Tetraodontiformes;
Tetraodontidae; Tetraodontidae; Takifugu.

REFERENCE 1
AUTHORS Elgar,G., Clark,M.S., Meek,S., Smith,S., Warner,S., Edwards,Y.J., Bouchireb,N., Cottage,A., Yeo,G.S., Umrانيا,Y., Williams,G. and Brenner,S.

TITLE Generation and analysis of 25 Mb of genomic DNA from the pufferfish Fugu rubripes by sequence scanning

JOURNAL Genome Res. 9 (10), 960-971 (1999)
MEDLINE 99455097
PUBMED 10523524

REFERENCE 2 (bases 1 to 111)
AUTHORS Elgar,G., Clark,M.S., Smith,S., Meek,S., Warner,S., Edwards,Y.J.K., Umrانيا,Y., Williams,G. and Brenner,S.

TITLE Direct Submission
JOURNAL Submitted (11-OCT-1999) MRC Human Genome Mapping Project Resource Centre, Hinxton, Cambridge, CB10 1SB. UK Email: biohelp@hgm.mrc.ac.uk

COMMENT Vector: pBluescript II KS
V-type: phagemid
PRIMER: KS
DESCR: One pass dye-terminator sequencing of cosmid cloned genomic sequence.

FEATURES

source Location/Qualifiers
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/organism="Takifugu rubripes"
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/db_xref="taxon:31033"
/clone="019B02d36"
/clone_lib="cosmid 019B02"

ORIGIN

Query Match 100.0%; Score 10; DB 9; Length 111;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 24 CGAACGTTTCG 33

RESULT 18
FR0035679/c
LOCUS 111 bp DNA linear GSS 25-FEB-2004
DEFINITION Fugu rubripes GSS sequence, clone 019B02d36, genomic survey sequence.

ACCESSION

VERSION AL123196.1 GI:6104811
KEYWORDS GSS; genome survey sequence.
SOURCE Takifugu rubripes (Fugu rubripes)
ORGANISM Takifugu rubripes

Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi; Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei; Acanthomorpha; Acanthopterygii; Percomorpha; Tetraodontiformes; Tetraodontidae; Tetraodontidae; Takifugu.

REFERENCE 1
AUTHORS Elgar,G., Clark,M.S., Meek,S., Smith,S., Warner,S., Edwards,Y.J., Bouchireb,N., Cottage,A., Yeo,G.S., Umrانيا,Y., Williams,G. and Brenner,S.

TITLE

Generation and analysis of 25 Mb of genomic DNA from the pufferfish Fugu rubripes by sequence scanning

JOURNAL Genome Res. 9 (10), 960-971 (1999)
MEDLINE 99455097
PUBMED 10523524

REFERENCE

2 (bases 1 to 111)
AUTHORS Elgar,G., Clark,M.S., Smith,S., Meek,S., Warner,S., Edwards,Y.J.K., Umrانيا,Y., Williams,G. and Brenner,S.

TITLE

Direct Submission
JOURNAL Submitted (11-OCT-1999) MRC Human Genome Mapping Project Resource Centre, Hinxton, Cambridge, CB10 1SB. UK Email: biohelp@hgm.mrc.ac.uk

COMMENT

Vector: pBluescript II KS
V-type: phagemid
PRIMER: KS
DESCR: One pass dye-terminator sequencing of cosmid cloned genomic sequence.

FEATURES

source Location/Qualifiers
1..111
/organism="Takifugu rubripes"
/mol_type="genomic DNA"
/db_xref="taxon:31033"
/clone="019B02d36"
/clone_lib="cosmid 019B02"

ORIGIN

Query Match 100.0%; Score 10; DB 9; Length 111;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 33 CGAACGTTTCG 24

RESULT 19

CD922571
LOCUS 116 bp mRNA linear EST 15-JUL-2003
DEFINITION G750.103M12F010528 G750 Triticum aestivum cDNA clone G750103M12, mRNA sequence.

ACCESSION CD922571
VERSION CD922571.1 GI:32770335
KEYWORDS EST.
SOURCE Triticum aestivum (bread wheat)

ORGANISM

Triticum aestivum
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; Poideae; Triticeae; Triticum.
1 (bases 1 to 116)

REFERENCE 1
AUTHORS Genoplante.
TITLE Genoplante, a major partnership french program in plant genomics
JOURNAL Unpublished (2003)
COMMENT Contact: Genoplante
Genoplante
93, rue Henri Rochefort 91025 EVRY CEDEX France
Tel: 33 1 69 47 54 00
Fax: 33 1 69 47 54 10
This sequence has been generated in the framework of the french plant genomics programme 'Genoplante' (<http://www.genoplante.com>)

and <http://genoplate-info.info.biogen.fr>).

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FEATURES
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      /cultivar="recital"
      /db_xref="taxon:4565"
      /clone="G750103M12"
      /tissue_type="grain (750 degrees per day after
      pollination)"
      /clone_lib="G750"

ORIGIN
  Query Match      100.0%; Score 10; DB 6; Length 116;
  Best Local Similarity 100.0%; Pred. No. 1.1e+04;
  Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 63 CGAACGTTTCG 72

RESULT 20
CD922571/c
LOCUS
DEFINITION
  G750.103M12F010528 G750 Triticum aestivum cDNA clone G750103M12,
  mRNA sequence.
ACCESSION
  CD922571
VERSION
  CD922571.1 GI:32770335
KEYWORDS
  EST.
SOURCE
  Triticum aestivum (bread wheat)
  ORGANISM
    Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
    Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae;
    Pooideae; Triticeae; Triticum.
  1 (bases 1 to 116)
  Genoplate.
  Genoplate, a major partnership french program in plant genomics
  Unpublished (2003)
  Contact: Genoplate
  Genoplate
  93, rue Henri Rochefort 91025 EVRY CEDEX France
  Tel: 33 1 69 47 54 00
  Fax: 33 1 69 47 54 10
  This sequence has been generated in the framework of the french
  plant genomics programme 'Genoplate' (http://www.genoplate.com)
  and http://genoplate-info.info.biogen.fr).

FEATURES
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    location/Qualifiers
      1..116
      /organism="Triticum aestivum"
      /mol_type="mRNA"
      /cultivar="recital"
      /db_xref="taxon:4565"
      /clone="G750103M12"
      /tissue_type="grain (750 degrees per day after
      pollination)"
      /clone_lib="G750"

ORIGIN
  Query Match      100.0%; Score 10; DB 6; Length 116;
  Best Local Similarity 100.0%; Pred. No. 1.1e+04;
  Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 72 CGAACGTTTCG 63

RESULT 21
TA323B09Q
LOCUS
DEFINITION
  116 bp DNA linear GSS 13-DEC-2000
  T. brucei sheared genomic DNA clone 323b09, reverse sequence,
  genomic survey sequence.

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ACCESSION
  AL491306
VERSION
  AL491306.1 GI:11866954
KEYWORDS
  GSS.
SOURCE
  Trypanosoma brucei
  ORGANISM
    Eukaryota; Euglenozoa; Kinetoplastida; Trypanosomatidae;
    Trypanosoma.
  1 (bases 1 to 116)
  Hall, N., Bowman, S., Lennard, N.J., Doggett, J., Atkin, R.,
  Chillingworth, C., Ormond, D., Harris, B., El-Sayed, N., Hou, L.,
  Melville, S.E., Rajandream, M.A. and Barrell, B.G.
  Direct Submission
  Submitted (10-DEC-2000) Trypanosoma brucei genome sequencing
  project, Sanger Centre, The Wellcome Trust Genome Campus, Hinxton,
  Cambridge CB10 1SA, E-mail: barrell@sanger.ac.uk and
  nh@sanger.ac.uk
  Constructed at the Institute for Genomic Research (TIGR),
  Rockville, MD. Genomic DNA isolated from a cloned population of
  Trypanosoma brucei (TREU927/4 GUTat 10.1) was mechanically sheared
  to give a tight size distribution (
  4 kb). The v + i method used for the library construction is
  described in detail in Smith, H. and Venter, J.C. (Making small
  insert libraries for whole genome shotgun sequencing projects. In
  Genome Sequencing: A Practical Approach, eds. M. Vaudin and B.
  Barrell, Oxford University Press, 1999).
  Email: nelsayed@tigr.org
  Details of T. brucei sequencing at the Sanger Centre are available
  at http://www.sanger.ac.uk/Projects/T\_brucei/.
  location/Qualifiers
    1..116
    /organism="Trypanosoma brucei"
    /mol_type="genomic DNA"
    /strain="TREU927"
    /db_xref="taxon:5691"
    /clone="323b09"

ORIGIN
  Query Match      100.0%; Score 10; DB 9; Length 116;
  Best Local Similarity 100.0%; Pred. No. 1.1e+04;
  Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 67 CGAACGTTTCG 76

RESULT 22
TA323B09Q/c
LOCUS
DEFINITION
  116 bp DNA linear GSS 13-DEC-2000
  T. brucei sheared genomic DNA clone 323b09, reverse sequence,
  genomic survey sequence.
ACCESSION
  AL491306
VERSION
  AL491306.1 GI:11866954
KEYWORDS
  GSS.
SOURCE
  Trypanosoma brucei
  ORGANISM
    Eukaryota; Euglenozoa; Kinetoplastida; Trypanosomatidae;
    Trypanosoma.
  1 (bases 1 to 116)
  Hall, N., Bowman, S., Lennard, N.J., Doggett, J., Atkin, R.,
  Chillingworth, C., Ormond, D., Harris, B., El-Sayed, N., Hou, L.,
  Melville, S.E., Rajandream, M.A. and Barrell, B.G.
  Direct Submission
  Submitted (10-DEC-2000) Trypanosoma brucei genome sequencing
  project, Sanger Centre, The Wellcome Trust Genome Campus, Hinxton,
  Cambridge CB10 1SA, E-mail: barrell@sanger.ac.uk and
  nh@sanger.ac.uk
  Constructed at the Institute for Genomic Research (TIGR),
  Rockville, MD. Genomic DNA isolated from a cloned population of
  Trypanosoma brucei (TREU927/4 GUTat 10.1) was mechanically sheared
  to give a tight size distribution (
  4 kb). The v + i method used for the library construction is
  described in detail in Smith, H. and Venter, J.C. (Making small

```

insert libraries for whole genome shotgun sequencing projects. In
Genome Sequencing: A Practical Approach, eds. M. Vaudin and B.
Barrell, Oxford University Press, 1999).
Email: nelsayed@tr.org
Details of T. brucei sequencing at the Sanger Centre are available
at http://www.sanger.ac.uk/Projects/T_brucei/.

FEATURES

source 1..116
/organism="Trypanosoma brucei"
/mol_type="genomic DNA"
/strain="TREU927"
/db_xref="taxon:5691"
/clone="323b09"

ORIGIN

Query Match 100.0%; Score 10; DB 9; Length 116;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10

Db 76 CGAACGTTTCG 67

RESULT 23

LOCUS BY010148 121 bp mRNA linear EST 06-DEC-2002
DEFINITION BY010148 RIKEN full-length enriched, lung RCB-0558 LLC cDNA Mus
musculus cDNA clone G730017F01 5', mRNA sequence.

ACCESSION BY010148

VERSION BY010148.1

KEYWORDS GI:26070397

SOURCE Mus musculus (house mouse)

ORGANISM Mus musculus

REFERENCE

AUTHORS 1 (bases 1 to 121)
Okazaki, Y., Furuno, M., Kasukawa, T., Adachi, J., Bono, H., Kondo, S.,
Nikaido, I., Osato, N., Saito, R., Suzuki, H., Yamanaka, I.,
Kiyosawa, H., Yagi, K., Tomaru, Y., Hasegawa, Y., Nogami, A.,
Schonbach, C., Gojobori, T., Baldarelli, R., Hill, D.P., Bult, C.,
Hume, D.A., Quackenbush, J., Schriml, L.M., Kanapin, A., Matsuda, H.,
Batalov, S., Beisel, K.W., Blake, J.A., Bradt, D., Brusic, V.,
Ciothia, C., Corbani, L.E., Cousins, S., Dalia, E., Dragani, T.A.,
Fletcher, C.F., Forrest, A., Frazer, K.S., Gaasterland, T.,
Gariboldi, M., Gissi, C., Godzik, A., Gough, J., Grimmond, S.,
Gustincich, S., Hirokawa, N., Jackson, I.J., Jarvis, E.D., Kanai, A.,
Kawaji, H., Kawasawa, Y., Kedzierski, R.M., King, B.L., Konagaya, A.,
Kurochkin, I.V., Lee, Y., Lenhard, B., Lyons, P.A., Maglott, D.R.,
Maltais, L., Marchionni, L., McKenzie, L., Niki, H., Nagashima, T.,
Numata, K., Okido, T., Pavan, W.J., Perte, G., Pesole, G.,
Petrovsky, N., Pillai, R., Pontius, J.U., Qi, D., Ramchandran, S.,
Ravasi, T., Reed, J.C., Reed, D.J., Reid, J., Ring, B.Z., Ringwald, M.,
Sandelin, A., Schneider, C., Semple, C.A., Setou, M., Shimada, K.,
Sultana, R., Takenaka, Y., Taylor, M.S., Teasdale, R.D., Tomita, M.,
Verardo, R., Wagner, L., Walstedt, C., Wang, Y., Watanabe, Y.,
Wells, C., Wilming, L.G., Wysshaw-Boris, A., Yanagisawa, M., Yang, I.,
Yang, L., Yuan, Z., Zavolan, M., Zhu, Y., Zimmer, A., Carninci, P.,
Hayatsu, N., Hirozane-Kishikawa, T., Konno, H., Nakamura, M.,
Sakazume, N., Sato, K., Shiraki, T., Waki, K., Kawai, J., Aizawa, K.,
Arakawa, T., Fukuda, S., Hara, A., Hashizume, W., Imotani, K., Ishii, Y.,
Itoh, M., Kagawa, I., Miyazaki, A., Sakai, K., Sasaki, D., Shibata, K.,
Shinagawa, A., Yasunishi, A., Yoshino, M., A., Yoshino, M., Lander, E.S.,
Rogers, J., Birney, E. and Hayashizaki, Y.

Analysis of the mouse transcriptome based on functional annotation

of 60,770 full-length cDNAs

Nature 420, 563-573 (2002)

2354683

12466851

COMMENT

Contact: Yoshihide Hayashizaki
Laboratory for Genome Exploration Research Group, RIKEN Genomic
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The Institute of Physical and Chemical Research (RIKEN)

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Tel: 81-45-503-9222
Fax: 81-45-503-9216

Email: genome-res@genome.riken.jp, URL: <http://genome.gsc.riken.jp/>
Aizawa, K., Akimura, T., Arakawa, T., Carninci, P., Fukuda, S.,
Hirozane, T., Imotani, K., Ishii, Y., Itoh, M., Kawai, J., Konno, H.,
Miyazaki, A., Murata, M., Nakamura, M., Nomura, K., Numazaki, R.,
Ohno, M., Sakai, K., Sakazume, N., Sasaki, D., Sato, K., Shibata, K.,
Shiraki, T., Tagami, M., Waki, K., Watahiki, A., Muramatsu, M. and
Hayashizaki, Y. Direct Submission
Computational Analysis of Full-Length Mouse cDNAs Compared with
Human Genome Sequences Mamm. Genome. 12, 673-677 (2001)
Normalization and subtraction of cap-trapper-selected cDNAs to
prepare full-length cDNA libraries for rapid discovery of new
genes. Genome Res. 10 (10), 1617-1630 (2000)
RIKEN integrated sequence analysis (RISA) system-384-format
sequencing pipeline with 384 multicapillary sequencer. Genome Res.
10 (11), 1757-1771 (2000)

Computer-based methods for the mouse full-length cDNA
encyclopedia: real-time sequence clustering for construction of a
nonredundant cDNA library. Genome Res. 11 (2), 281-289 (2001)
cDNA library was prepared and sequenced in Mouse Genome
Encyclopedia Project of Genome Exploration Research Group in Riken
Genomic Sciences Center and Genome Science Laboratory in RIKEN.
Division of Experimental Animal Research in Riken contributed to
prepare mouse tissues.

Please visit our web site (<http://genome.gsc.riken.go.jp>) for
further details.

FEATURES

source 1..121
Location/Qualifiers
/organism="Mus musculus"
/mol_type="mRNA"
/db_xref="taxon:10090"
/clone="G730017F01"
/tissue_type="lung"
/cell_line="RCB-0558 LLC"
/clone_lib="RIKEN full-length enriched, lung RCB-0558 LLC
cDNA"

ORIGIN

Query Match 100.0%; Score 10; DB 5; Length 121;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10

Db 29 CGAACGTTTCG 38

RESULT 24

LOCUS BY010148/c 121 bp mRNA linear EST 06-DEC-2002
DEFINITION BY010148 RIKEN full-length enriched, lung RCB-0558 LLC cDNA Mus
musculus cDNA clone G730017F01 5', mRNA sequence.

ACCESSION BY010148

VERSION BY010148.1

KEYWORDS GI:26070397

SOURCE EST.

ORGANISM Mus musculus (house mouse)

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
1 (bases 1 to 121)
Okazaki, Y., Furuno, M., Kasukawa, T., Adachi, J., Bono, H., Kondo, S.,
Nikaido, I., Osato, N., Saito, R., Suzuki, H., Yamanaka, I.,
Kiyosawa, H., Yagi, K., Tomaru, Y., Hasegawa, Y., Nogami, A.,
Schonbach, C., Gojobori, T., Baldarelli, R., Hill, D.P., Bult, C.,
Hume, D.A., Quackenbush, J., Schriml, L.M., Kanapin, A., Matsuda, H.,
Batalov, S., Beisel, K.W., Blake, J.A., Bradt, D., Brusic, V.,
Ciothia, C., Corbani, L.E., Cousins, S., Dalia, E., Dragani, T.A.,
Fletcher, C.F., Forrest, A., Frazer, K.S., Gaasterland, T.,
Gariboldi, M., Gissi, C., Godzik, A., Gough, J., Grimmond, S.,
Gustincich, S., Hirokawa, N., Jackson, I.J., Jarvis, E.D., Kanai, A.,
Kawaji, H., Kawasawa, Y., Kedzierski, R.M., King, B.L., Konagaya, A.,

Kurochkin, I.V., Lee, Y., Lenhard, B., Lyons, P.A., Maglott, D.R., Maltais, L., Marchionni, L., McKenzie, L., Miki, H., Nagashima, T., Numata, K., Okido, T., Pavan, W.J., Perte, G., Pesole, G., Petrovsky, N., Pillai, R., Pontius, J.U., Qi, D., Ramachandran, S., Ravasi, T., Reed, J.C., Reed, D.J., Reid, J., Ring, B.Z., Ringwald, M., Sandelin, A., Schneider, C., Semple, C.A., Setou, M., Shimada, K., Sultana, R., Takenaka, Y., Taylor, M.S., Teasdale, R.D., Tomita, M., Varardo, R., Wagner, L., Wanstedt, C., Wang, Y., Watanabe, Y., Wells, C., Wilming, L.G., Wynshaw-Boris, A., Yanagisawa, M., Yang, I., Yuan, L., Yuan, Z., Zavolan, M., Zhu, Y., Zimmer, A., Carninci, P., Hayatsu, N., Hirozane-Kishikawa, T., Konno, H., Nakamura, M., Sakazume, N., Sato, K., Shiraki, T., Waki, K., Kawai, J., Aizawa, K., Arakawa, T., Fukuda, S., Hara, A., Hashizume, W., Imotani, K., Ishii, Y., Itoh, M., Kagawa, I., Miyazaki, A., Sakai, K., Sasaki, D., Shibata, K., Shingawa, A., Yasunishi, A., Yoshino, M., Waterston, R., Lander, E.S., Rogers, J., Birney, E. and Hayashizaki, Y.

Analysis of the mouse transcriptome based on functional annotation of 60,770 full-length cDNAs

Nature 420, 563-573 (2002)

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1246851

CONTACT: Yoshihide Hayashizaki

Laboratory for Genome Exploration Research Group, RIKEN Genomic Sciences Center (GSC), Yokohama Institute

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Tel: 81-45-503-9222

Fax: 81-45-503-9216

Email: genome-res@gsc.riken.jp, URL: http://genome.gsc.riken.jp/

Aizawa, K., Akimura, T., Arakawa, T., Carninci, P., Fukuda, S., Hirozane, T., Imotani, K., Ishii, Y., Itoh, M., Kawai, J., Konno, H., Miyazaki, A., Murata, M., Nakamura, M., Nomura, K., Numazaki, R., Ohno, M., Sakai, K., Sakazume, N., Sasaki, D., Sato, K., Shibata, K., Shiraki, T., Tagami, M., Waki, K., Watahiki, A., Muramatsu, M. and Hayashizaki, Y. Direct Submission

Computational Analysis of Full-length Mouse cDNAs Compared with Human Genome Sequences Mamm. Genome. 12, 673-677 (2001)

Normalization and subtraction of cap-trapper-selected cDNAs to prepare full-length cDNA libraries for rapid discovery of new genes. Genome Res. 10 (10), 1617-1630 (2000)

RIKEN integrated sequence analysis (RISA) system--384-format sequencing pipeline with 384 multicapillary sequencer. Genome Res. 10 (11), 1757-1771 (2000)

Computer-based methods for the mouse full-length cDNA encyclopedia: real-time sequence clustering for construction of a nonredundant cDNA library. Genome Res. 11 (2), 281-289 (2001)

cDNA library was prepared and sequenced in Mouse Genome Encyclopedia Project of Genome Exploration Research Group in Riken Genomic Sciences Center and Genome Science Laboratory in RIKEN. Division of Experimental Animal Research in Riken contributed to prepare mouse tissues.

Please visit our web site (<http://genome.gsc.riken.go.jp>) for further details.

FEATURES

source

Location/Qualifiers

1. .121

/organism="Mus musculus"

/mol type="mRNA"

/db xref="taxon:10090"

/clones="G730017F01"

/tissue_type="lung"

/cell_line="RCB-0558 LLC"

/clone_lib="RIKEN full-length enriched, lung RCB-0558 LLC cDNA"

ORIGIN

Query Match

Best Local Similarity

Matches

10; Conservative

0; Mismatches

0; Indels

0; Gaps

0;

Qy

1 CGAACGTTTCG 10

|||||

Db

38 CGAACGTTTCG 29

RESULT 25

CB093820

LOCUS

DEFINITION

ze47a04.g5 Cycad Leaf Library (NYBG) Cycas rumphii cDNA clone

ze47a04, mRNA sequence.

CB093820

VERSION

CB093820.1 GI:27918012

KEYWORDS

EST.

SOURCE

Cycas rumphii

ORGANISM

Cycas rumphii

REFERENCE

Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Cycadophyta; Cycadales; Cycadaceae; Cycas.

AUTHORS

Brenner, E.D., Katari, M.S., Dedhia, N.N., O'Shaughnessy, A.L., Baliya, V., Martienssen, R.A., McCombie, R.W., Benfey, P., Coruzzi, G. and Stevenson, D.

TITLE

Expressed tag sequences from Cycas ovule (NYBG)

JOURNAL

Unpublished (2003)

COMMENT

Contact: W. Richard McCombie

Lita Annenberg Hazen Genome Sequencing Center.

Cold Spring Harbor Laboratory

PO Box 100, Cold Spring Harbor, NY 11724, USA

Tel: 516 367 8884

Fax: 516 367 8874

Email: mcombie@cshl.org

Plate: ze47 row: a column: 04

Seq primer: -21M13UnivRev

High quality sequence stop: 123.

FEATURES

Location/Qualifiers

1. .123

/organism="Cycas rumphii"

/mol type="mRNA"

/db xref="taxon:58031"

/clones="ze47a04"

/sex="Female"

/clone_lib="Cycad Leaf Library (NYBG)"

/notes="Organ: Young leaf; Vector: pBK-CMV; Site 1: Xho I; Site 2: Eco RI; Date: Completed 09/01/2001. Submitted to CSHL 09/05/2001. Sample: Young emergent leaves. From New York Botanical Garden Conservatory accession number 808/59 A collected 03/2001. Library: Made using Stratagene's ZAP Express Vector Kit. Library was size fractionated for large inserts."

ORIGIN

Query Match

Best Local Similarity

Matches

10; Conservative

0; Mismatches

0; Indels

0; Gaps

0;

Qy

1 CGAACGTTTCG 10

|||||

Db

91 CGAACGTTTCG 100

RESULT 26

CB093820/c

LOCUS

DEFINITION

ze47a04.g5 Cycad Leaf Library (NYBG) Cycas rumphii cDNA clone

ze47a04, mRNA sequence.

CB093820

VERSION

CB093820.1 GI:27918012

KEYWORDS

EST.

SOURCE

Cycas rumphii

ORGANISM

Cycas rumphii

REFERENCE

Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Cycadophyta; Cycadales; Cycadaceae; Cycas.

AUTHORS

Brenner, E.D., Katari, M.S., Dedhia, N.N., O'Shaughnessy, A.L., Baliya, V., Martienssen, R.A., McCombie, R.W., Benfey, P., Coruzzi, G. and Stevenson, D.

TITLE

Expressed tag sequences from Cycas ovule (NYBG)

JOURNAL

Unpublished (2003)

COMMENT

Contact: W. Richard McCombie
 Lita Annenberg Hazen Genome Sequencing Center
 Cold Spring Harbor Laboratory
 PO Box 100, Cold Spring Harbor, NY 11724, USA
 Tel: 516 367 8884
 Fax: 516 367 8874
 Email: mcombie@cshl.org
 Plate: ze47 row: a column: 04
 Seq primer: -21M13UnivRev
 High quality sequence stop: 123.

FEATURES

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 /organism="Cycas rumphii"
 /mol_type="mRNA"
 /db_xref="taxon:58031"
 /clones="ze47a04"
 /sex="Female"
 /clone_lib="Cycad Leaf Library (NYBG)"
 /notes="Organ: Young leaf; Vector: pBK-CMV; Site 1: Xho I;
 Site 2: Eco RI; Date: Completed 09/01/2001. Submitted to
 CSHL 09/05/2001. Sample: Young emergent leaves. From New
 York Botanical Garden Conservatory accession number 808/59
 A (collected 03/2001). Library: Made using Stratagene's
 ZAP Express Vector Kit. Library was size fractionated for
 large inserts."

ORIGIN

Query Match 100.0%; Score 10; DB 6; Length 123;
 Best Local Similarity 100.0%; Pred. No. 1.1e+04;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
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Db 100 CGAACGTTTCG 91

RESULT 27

BH223637 123 bp DNA linear GSS 08-NOV-2001
 LOCUS 1006114A09.y1 1006 - RescueMu Grid G Zea mays genomic, genomic
 DEFINITION survey sequence.

ACCESSION BH223637
 VERSION BH223637.1 GI:16819804
 KEYWORDS GSS.
 SOURCE Zea mays

ORGANISM

Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
 Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; PACCAD
 clade; Panicoideae; Andropogoneae; Zea.

1 (bases 1 to 123)
 Walbot,V.

REFERENCE

AUTHORS Walbot,V.
 TITLE Maize genomic sequences found using engineered RescueMu transposon
 JOURNAL Unpublished (2001)
 COMMENT Contact: Walbot V

DEPARTMENT OF BIOLOGICAL SCIENCES

Stanford University
 855 California Ave, Palo Alto, CA 94304, USA
 Tel: 650 723 2227
 Fax: 650 725 8221

Email: walbot@stanford.edu
 Possible ligation site so sequence was trimmed. Post-ligation
 sequence submitted separately.

Plate: 1006114 row: 11
 Class: transposon-tagged.

FEATURES

source
 1. .123
 /organism="Zea mays"
 /mol_type="genomic DNA"
 /cultivar="mixed background W23/A188/B73"
 /db_xref="taxon:4577"
 /tissue_type="leaf"
 /dev_stage="adult"
 /lab_host="DH10B"

ORIGIN

Query Match 100.0%; Score 10; DB 8; Length 123;
 Best Local Similarity 100.0%; Pred. No. 1.1e+04;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
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Db 33 CGAACGTTTCG 42

RESULT 28

BH223637/c 123 bp DNA linear GSS 08-NOV-2001
 LOCUS 1006114A09.y1 1006 - RescueMu Grid G Zea mays genomic, genomic
 DEFINITION survey sequence.

ACCESSION BH223637
 VERSION BH223637.1 GI:16819804
 KEYWORDS GSS.
 SOURCE Zea mays

ORGANISM

Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
 Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; PACCAD
 clade; Panicoideae; Andropogoneae; Zea.

1 (bases 1 to 123)
 Walbot,V.

REFERENCE

AUTHORS Walbot,V.
 TITLE Maize genomic sequences found using engineered RescueMu transposon
 JOURNAL Unpublished (2001)
 COMMENT Contact: Walbot V

DEPARTMENT OF BIOLOGICAL SCIENCES

Stanford University
 855 California Ave, Palo Alto, CA 94304, USA
 Tel: 650 723 2227
 Fax: 650 725 8221

Email: walbot@stanford.edu
 Possible ligation site so sequence was trimmed. Post-ligation
 sequence submitted separately.

Plate: 1006114 row: 11
 Class: transposon-tagged.

FEATURES

source
 1. .123
 /organism="Zea mays"
 /mol_type="genomic DNA"
 /cultivar="mixed background W23/A188/B73"
 /db_xref="taxon:4577"
 /tissue_type="leaf"
 /dev_stage="adult"
 /lab_host="DH10B"

/clone_lib="1006 - RescueMu Grid G"
 /notes="Organ: leaf; Vector: RescueMu (engineered from
 pBlueScript backbone); Site 1: BamHI; Site 2: BglII;
 RescueMu is a 4.9 kb, modified maize Mu transposon
 designed to allow plasmid rescue from total genomic DNA.
 Mu elements insert preferentially into transcription
 units. For more information on RescueMu, go to the web
 site 'www.zmdb.iastate.edu' and follow the links for
 'RescueMu.' Grid G was grown at Stanford in 2000. DNA was
 extracted from leaf punches, double digested using BamHI
 and BglII, and ligated to form circular plasmids. DH10B
 cells were transformed and then screened on LB plates with

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ORIGIN
Query Match      100.0%; Score 10; DB 8; Length 123;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
Db 42 CGAACGTTTCG 33

RESULT 29
LOCUS CV020018 128 bp mRNA linear EST 19-AUG-2004
DEFINITION tbt_000543 Normalized Nicotiana tabacum cDNA library Nicotiana
ACCESSION CV020018
VERSION CV020018.1 GI:51461526
KEYWORDS EST.
SOURCE Nicotiana tabacum (common tobacco)
ORGANISM Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots;
asterids; lamids; Solanales; Solanaceae; Nicotiana.
REFERENCE 1 (bases 1 to 128)
AUTHORS Li, W.Z., Shao, Y., Li, Y.P., Lu, X.P., Montero, D.C., Alvarez, S.P.,
Deng, Y., Jin, Q.C., Wang, S., Dai, C.E., Zeng, Z.L., Wang, Y.Q.,
Dong, H.T. and Li, D.B.
TITLE Large-scale identification of ESTs from Nicotiana tabacum by
normalized cDNA library sequencing
JOURNAL Unpublished (2004)
COMMENT Contact: Wenzheng Li, Yan Shao, Yongping Li, Xiuping Lu, Limin
Song, Haitao Dong, Debao Li
The Tobacco Science Research Institute of Yunnan Province; Yunnan
Provincial Tobacco Group Dali Branch; Bioinformatics and Gene
Network Research Group, Zhejiang University
The Tobacco Science Research Institute of Yunnan Province, Yuxi
653100, China
Email: webmaster@estarray.org, URL: http://www.estarray.org
Only the high quality region of sequence was submitted.
Seq primer: M13.
Location/Qualifiers
source 1..128
/organism="Nicotiana tabacum"
/mol_type="mRNA"
/db_xref="taxon:4097"
/clone="tbt_000543"
/tissue_type="Mixed"
/clone_lib="Normalized Nicotiana tabacum cDNA library"
/note="Vector: pBS-SK+"

ORIGIN
Query Match      100.0%; Score 10; DB 7; Length 128;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
Db 74 CGAACGTTTCG 65

RESULT 31
LOCUS CN070597 131 bp mRNA linear EST 30-MAR-2004
DEFINITION 857252 MARC 3PIG Sus scrofa cDNA 5', mRNA sequence.
ACCESSION CN070597
VERSION CN070597.1 GI:45846654
KEYWORDS EST.
SOURCE Sus scrofa (pig)
ORGANISM Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Cetartiodactyla; Suina; Suidae; Sus.
REFERENCE 1 (bases 1 to 131)
AUTHORS Smith, T.P.L., Freking, B.A., Ford, J.J., Vallet, J.L., Fox, J.,
Wise, T.A., Noneman, D.J., Wray, J.E. and Keele, J.W.
TITLE A second set of porcine ESTs from a pooled-tissue normalized
library
JOURNAL Unpublished (2003)
COMMENT Contact: Smith TPL
USDA, ARS, US Meat Animal Research Center
PO Box 166, Clay Center, NE 68933-0166, USA
Tel: 402 762 4366
Fax: 402 762 4390
Email: smith@email.marc.usda.gov
Single pass sequencing. Bases called with phred v0.020425.c and
trimmed with the aid of the trim_alt option. Vector identified with
cross_match v0.990329.
Plate: SRG8027 row: L column: 16
Seq primer: GTAATACGACTCACTATAGG.
Location/Qualifiers
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/mol_type="mRNA"
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/tissue_type="pooled"

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Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots;
asterids; lamids; Solanales; Solanaceae; Nicotiana.
REFERENCE 1 (bases 1 to 128)
AUTHORS Li, W.Z., Shao, Y., Li, Y.P., Lu, X.P., Montero, D.C., Alvarez, S.P.,
Deng, Y., Jin, Q.C., Wang, S., Dai, C.E., Zeng, Z.L., Wang, Y.Q.,
Dong, H.T. and Li, D.B.
TITLE Large-scale identification of ESTs from Nicotiana tabacum by
normalized cDNA library sequencing
JOURNAL Unpublished (2004)
COMMENT Contact: Wenzheng Li, Yan Shao, Yongping Li, Xiuping Lu, Limin
Song, Haitao Dong, Debao Li
The Tobacco Science Research Institute of Yunnan Province; Yunnan
Provincial Tobacco Group Dali Branch; Bioinformatics and Gene
Network Research Group, Zhejiang University
The Tobacco Science Research Institute of Yunnan Province, Yuxi
653100, China
Email: webmaster@estarray.org, URL: http://www.estarray.org
Only the high quality region of sequence was submitted.
Seq primer: M13.
Location/Qualifiers
source 1..128
/organism="Nicotiana tabacum"
/mol_type="mRNA"
/db_xref="taxon:4097"
/clone="tbt_000543"
/tissue_type="Mixed"
/clone_lib="Normalized Nicotiana tabacum cDNA library"
/note="Vector: pBS-SK+"

ORIGIN
Query Match      100.0%; Score 10; DB 7; Length 128;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
Db 74 CGAACGTTTCG 65

RESULT 31
LOCUS CN070597 131 bp mRNA linear EST 30-MAR-2004
DEFINITION 857252 MARC 3PIG Sus scrofa cDNA 5', mRNA sequence.
ACCESSION CN070597
VERSION CN070597.1 GI:45846654
KEYWORDS EST.
SOURCE Sus scrofa (pig)
ORGANISM Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Cetartiodactyla; Suina; Suidae; Sus.
REFERENCE 1 (bases 1 to 131)
AUTHORS Smith, T.P.L., Freking, B.A., Ford, J.J., Vallet, J.L., Fox, J.,
Wise, T.A., Noneman, D.J., Wray, J.E. and Keele, J.W.
TITLE A second set of porcine ESTs from a pooled-tissue normalized
library
JOURNAL Unpublished (2003)
COMMENT Contact: Smith TPL
USDA, ARS, US Meat Animal Research Center
PO Box 166, Clay Center, NE 68933-0166, USA
Tel: 402 762 4366
Fax: 402 762 4390
Email: smith@email.marc.usda.gov
Single pass sequencing. Bases called with phred v0.020425.c and
trimmed with the aid of the trim_alt option. Vector identified with
cross_match v0.990329.
Plate: SRG8027 row: L column: 16
Seq primer: GTAATACGACTCACTATAGG.
Location/Qualifiers
source 1..131
/organism="Sus scrofa"
/mol_type="mRNA"
/db_xref="taxon:9823"
/tissue_type="pooled"

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/lab host="DH10B"
/clone lib="MARC 3P1G"
/note="Vector: pcDNA3.1; Site 1: EcoRI; Site 2: NotI;
Library made with RNA pooled from multiple tissues
including brain, liver, muscle, placenta/endometrium,
ovary, testes, and bone marrow."

ORIGIN
Query Match      100.0%; Score 10; DB 7; Length 131;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
    |||||
Db 88 CGAACGTTTCG 97

RESULT 32
CN070597/c
LOCUS      131 bp mRNA linear EST 30-MAR-2004
DEFINITION 857252 MARC 3P1G Sus scrofa cDNA 5', mRNA sequence.
ACCESSION  CN070597
VERSION     CN070597.1 GI:45846654
KEYWORDS   EST.
SOURCE     Sus scrofa (pig)
ORGANISM   Sus scrofa
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Cetartiodactyla; Suina; Suidae; Sus.
REFERENCE  1 (bases 1 to 131)
AUTHORS   Smith,T.P.L., Freking,B.A., Ford,J.J., Vallet,J.L., Fox,J.,
Wise,T.A., Nonneman,D.J., Wray,J.E. and Keele,J.W.
TITLE     A second set of porcine ESTs from a pooled-tissue normalized
library
JOURNAL   Unpublished (2003)
COMMENT   Contact: Smith TPL
          USDA, ARS, US Meat Animal Research Center
          PO Box 166, Clay Center, NE 68933-0166, USA
          Tel: 402 762 4366
          Fax: 402 762 4390
          Email: smith@email.marc.usda.gov
          Single pass sequencing. Bases called with phred v0.020425.c and
          trimmed with the aid of the trim_alt option. Vector identified with
          cross_match v0.990329.
          Plate: SRG8027 row: L column: 16
          Seq primer: GTAATACGACCTCACTATAGGG.

FEATURES             source
    1..131
        Location/Qualifiers
            /organism="Sus scrofa"
            /mol_type="mRNA"
            /db_xref="taxon:9823"
            /tissue_type="pooled"
            /lab host="DH10B"
            /clone lib="MARC 3P1G"
            /note="Vector: pcDNA3.1; Site 1: EcoRI; Site 2: NotI;
Library made with RNA pooled from multiple tissues
including brain, liver, muscle, placenta/endometrium,
ovary, testes, and bone marrow."

ORIGIN
Query Match      100.0%; Score 10; DB 7; Length 131;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
    |||||
Db 97 CGAACGTTTCG 88

RESULT 33
CV017529
LOCUS      132 bp mRNA linear EST 19-AUG-2004
DEFINITION tbt_010370 Normalized Nicotiana tabacum cDNA library Nicotiana
tabacum cDNA clone tbt_010370 5', mRNA sequence.

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ACCESSION  CV017529
VERSION    CV017529.1 GI:51455881
KEYWORDS   Nicotiana tabacum (common tobacco)
SOURCE     Nicotiana tabacum
ORGANISM   Nicotiana tabacum
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots;
asterids; lamiids; Solanales; Solanaceae; Nicotiana.
REFERENCE  1 (bases 1 to 132)
AUTHORS   Li,W.Z., Shao,Y., Li,Y.P., Lu,X.P., Montero,D.C., Alvarez,S.P.,
Deng,Y., Jin,Q.C., Wang,S., Dai,C.E., Zeng,Z.L., Wang,Y.Q.,
Dong,H.T. and Li,D.B.
TITLE     Large-scale identification of ESTs from Nicotiana tabacum by
normalized cDNA library sequencing
JOURNAL   Unpublished (2004)
COMMENT   Contact: Wenzheng Li,Yan Shao,Yongping Li,Xiuping Lu,Limin
Song,Haitao Dong,Debao Li
The Tobacco Science Research Institute of Yunnan Province; Yunnan
Provincial Tobacco Group Dali Branch; Bioinformatics and Gene
Network Research Group, Zhejiang University
The Tobacco Science Research Institute of Yunnan Province, Yuxi
653100, China
Email: webmaster@estarray.org, URL: http://www.estarray.org
Only the high quality region of sequence was submitted.
Seq primer: M13.

FEATURES             source
    1..132
        Location/Qualifiers
            /organism="Nicotiana tabacum"
            /mol_type="mRNA"
            /db_xref="taxon:4097"
            /clone="tbt_010370"
            /tissue_type="Mixed"
            /clone_lib="Normalized Nicotiana tabacum cDNA library"
            /note="Vector: pBS-SK+"

ORIGIN
Query Match      100.0%; Score 10; DB 7; Length 132;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
    |||||
Db 47 CGAACGTTTCG 56

RESULT 34
CV017529/c
LOCUS      132 bp mRNA linear EST 19-AUG-2004
DEFINITION tbt_010370 Normalized Nicotiana tabacum cDNA library Nicotiana
tabacum cDNA clone tbt_010370 5', mRNA sequence.
ACCESSION  CV017529
VERSION    CV017529.1 GI:51455881
KEYWORDS   Nicotiana tabacum (common tobacco)
SOURCE     Nicotiana tabacum
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots;
asterids; lamiids; Solanales; Solanaceae; Nicotiana.
REFERENCE  1 (bases 1 to 132)
AUTHORS   Li,W.Z., Shao,Y., Li,Y.P., Lu,X.P., Montero,D.C., Alvarez,S.P.,
Deng,Y., Jin,Q.C., Wang,S., Dai,C.E., Zeng,Z.L., Wang,Y.Q.,
Dong,H.T. and Li,D.B.
TITLE     Large-scale identification of ESTs from Nicotiana tabacum by
normalized cDNA library sequencing
JOURNAL   Unpublished (2004)
COMMENT   Contact: Wenzheng Li,Yan Shao,Yongping Li,Xiuping Lu,Limin
Song,Haitao Dong,Debao Li
The Tobacco Science Research Institute of Yunnan Province; Yunnan
Provincial Tobacco Group Dali Branch; Bioinformatics and Gene
Network Research Group, Zhejiang University
The Tobacco Science Research Institute of Yunnan Province, Yuxi
653100, China
Email: webmaster@estarray.org, URL: http://www.estarray.org

```

Only the high quality region of sequence was submitted.

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FEATURES
  source
    1. .132
      /organism="Nicotiana tabacum"
      /mol_type="mRNA"
      /db_xref="taxon:4097"
      /clone_lib="Normalized Nicotiana tabacum cDNA library"
      /tissue_type="Mixed"
      /note="Vector: pBS-SK+"

ORIGIN
Query Match      100.0%; Score 10; DB 7; Length 132;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 56 CGAACGTTTCG 47

RESULT 35
LOCUS      CV298664      133 bp      mRNA      linear      EST 23-SEP-2004
DEFINITION EST87123 petunia floral post-pollination cDNA library Petunia x
hybrida cDNA clone Petunia-PP-10-G03 5' end, mRNA sequence.
ACCESSION  CV298664
VERSION     CV298664.1 GI:52592185
KEYWORDS   EST.
SOURCE     Petunia x hybrida
ORGANISM   Petunia x hybrida
            Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
            Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots;
            asterids; lamids; Solanales; Solanaceae; Petunia.
REFERENCE  1 (bases 1 to 133)
AUTHORS   Shibuya,K., Underwood,B., Loucas,H., Farmerie,W., Jones,M. and
            Clark,D.
TITLE     Petunia x hybrida EST collection
JOURNAL   Unpublished (2004)
COMMENT   Contact: David Clark
            UF floriculture Biotechnology Lab
            University of Florida
            Environmental Horticulture Department, 1545 Fifield Hall, Box
            110670, Gainesville, FL 32611-0670, USA
            Tel: 352-392-1831 x370
            Fax: 352-392-3870
            Email: dclark@mail.ifas.ufl.edu
            Contact Dr. Clark (dclark@mail.ifas.ufl.edu) for clone information
            Seq primer: T3 primer.

FEATURES
  source
    1. .133
      /organism="Petunia x hybrida"
      /mol_type="mRNA"
      /cultivar="Mitchell Diploid (aka. Mitchell, aka W115 in
      Europe)"
      /db_xref="taxon:4102"
      /clone_lib="petunia floral post-pollination cDNA library"
      /lab_host="petunia floral post-pollination cDNA library"
      /note="Vector: pBluescript SK-; Site 1: EcoRI; Site 2:
      XhoI; supplier: Petunia x hybrida cv. Mitchell Diploid
      plants were grown from seeds to a fully flowering stage
      under standard greenhouse conditions. Flowers at anthesis
      stage were self-pollinated and entire flowers were
      collected at 0, 5, 10, 24, 36 and 48 hours after
      pollination from plants grown in standard greenhouses.
      Total RNA was extracted from each sample, and 100
      micrograms of each sample was combined for subsequent poly
      A+ mRNA selection and cDNA synthesis."

ORIGIN
Query Match      100.0%; Score 10; DB 7; Length 133;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 128 CGAACGTTTCG 119

RESULT 37
LOCUS      CG780524      133 bp      DNA      linear      GSS 29-OCT-2003
DEFINITION 1123040C05.y1 1123 - RescueMu Grid L Zea mays genomic, genomic

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Query Match      100.0%; Score 10; DB 7; Length 133;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 119 CGAACGTTTCG 128

RESULT 36
LOCUS      CV298664      133 bp      mRNA      linear      EST 23-SEP-2004
DEFINITION EST87123 petunia floral post-pollination cDNA library Petunia x
hybrida cDNA clone Petunia-PP-10-G03 5' end, mRNA sequence.
ACCESSION  CV298664
VERSION     CV298664.1 GI:52592185
KEYWORDS   EST.
SOURCE     Petunia x hybrida
ORGANISM   Petunia x hybrida
            Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
            Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots;
            asterids; lamids; Solanales; Solanaceae; Petunia.
REFERENCE  1 (bases 1 to 133)
AUTHORS   Shibuya,K., Underwood,B., Loucas,H., Farmerie,W., Jones,M. and
            Clark,D.
TITLE     Petunia x hybrida EST collection
JOURNAL   Unpublished (2004)
COMMENT   Contact: David Clark
            UF floriculture Biotechnology Lab
            University of Florida
            Environmental Horticulture Department, 1545 Fifield Hall, Box
            110670, Gainesville, FL 32611-0670, USA
            Tel: 352-392-1831 x370
            Fax: 352-392-3870
            Email: dclark@mail.ifas.ufl.edu
            Contact Dr. Clark (dclark@mail.ifas.ufl.edu) for clone information
            Seq primer: T3 primer.

FEATURES
  source
    1. .133
      /organism="Petunia x hybrida"
      /mol_type="mRNA"
      /cultivar="Mitchell Diploid (aka. Mitchell, aka W115 in
      Europe)"
      /db_xref="taxon:4102"
      /clone_lib="petunia floral post-pollination cDNA library"
      /lab_host="petunia floral post-pollination cDNA library"
      /note="Vector: pBluescript SK-; Site 1: EcoRI; Site 2:
      XhoI; supplier: Petunia x hybrida cv. Mitchell Diploid
      plants were grown from seeds to a fully flowering stage
      under standard greenhouse conditions. Flowers at anthesis
      stage were self-pollinated and entire flowers were
      collected at 0, 5, 10, 24, 36 and 48 hours after
      pollination from plants grown in standard greenhouses.
      Total RNA was extracted from each sample, and 100
      micrograms of each sample was combined for subsequent poly
      A+ mRNA selection and cDNA synthesis."

ORIGIN
Query Match      100.0%; Score 10; DB 7; Length 133;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 128 CGAACGTTTCG 119

RESULT 37
LOCUS      CG780524      133 bp      DNA      linear      GSS 29-OCT-2003
DEFINITION 1123040C05.y1 1123 - RescueMu Grid L Zea mays genomic, genomic

```

```

survey sequence.
CG780524
VERSION CG780524.1 GI:38041313
KEYWORDS GSS.
SOURCE Zea mays
ORGANISM Zea mays
REFERENCE
AUTHORS Walbot, V.
TITLE Maize genomic sequences found using engineered RescueMu transposon
JOURNAL Unpublished (2001)
COMMENT Contact: Walbot V
Department of Biological Sciences
Stanford University
855 California Ave, Palo Alto, CA 94304, USA
Tel: 650 723 2227
Fax: 650 725 8221
Email: walbot@stanford.edu
Plate: 1123040 row: 15
Class: transposon-tagged.
Location/Qualifiers
1. .133
/organism="Zea mays"
/mol_type="genomic DNA"
/cultivar="mixed background W23/A188/B73/K55"
/db_xref="taxon:4577"
/tissue_type="leaf"
/dev stage="adult"
/lab host="DH10B"
/clone_lib="1123 - RescueMu Grid L"
/notes="Organ: leaf; Vector: RescueMu (engineered from pBluescript backbone); Site 1: BamHI; Site 2: BglII; RescueMu is a 4.9 kb, modified maize Mu transposon designed to allow plasmid rescue from total genomic DNA. Mu elements insert preferentially into transcription units. For more information on RescueMu, go to the web site 'www.zmdb.iastate.edu' and follow the links for 'RescueMu.' Grid L was grown in Molokai in 2001. DNA was extracted from leaf strips, double digested using BamHI and BglII, and ligated to form circular plasmids. DH10B cells were transformed and then screened on LB plates with ampicillin."

ORIGIN
Query Match 100.0%; Score 10; DB 9; Length 133;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
|||||
Db 74 CGAACGTTTCG 83

RESULT 38
CG780524/c
LOCUS 1123040C05.y1 1123 - RescueMu Grid L Zea mays genomic, GSS 29-OCT-2003
DEFINITION survey sequence.
ACCESSION CG780524
VERSION CG780524.1 GI:38041313
KEYWORDS GSS.
SOURCE Zea mays
ORGANISM Zea mays
REFERENCE
AUTHORS Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
TITLE Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; PACCAD
JOURNAL clade; Panicoideae; Andropogoneae; Zea.
1 (bases 1 to 133)
Walbot, V.
Maize genomic sequences found using engineered RescueMu transposon
Unpublished (2001)
Contact: Walbot V

FEATURES
source
1. .133
/organism="Zea mays"
/mol_type="genomic DNA"
/cultivar="mixed background W23/A188/B73/K55"
/db_xref="taxon:4577"
/tissue_type="leaf"
/dev stage="adult"
/lab host="DH10B"
/clone_lib="1123 - RescueMu Grid L"
/notes="Organ: leaf; Vector: RescueMu (engineered from pBluescript backbone); Site 1: BamHI; Site 2: BglII; RescueMu is a 4.9 kb, modified maize Mu transposon designed to allow plasmid rescue from total genomic DNA. Mu elements insert preferentially into transcription units. For more information on RescueMu, go to the web site 'www.zmdb.iastate.edu' and follow the links for 'RescueMu.' Grid L was grown in Molokai in 2001. DNA was extracted from leaf strips, double digested using BamHI and BglII, and ligated to form circular plasmids. DH10B cells were transformed and then screened on LB plates with ampicillin."

ORIGIN
Query Match 100.0%; Score 10; DB 9; Length 133;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
|||||
Db 74 CGAACGTTTCG 83

RESULT 38
CG780524/c
LOCUS 1123040C05.y1 1123 - RescueMu Grid L Zea mays genomic, GSS 29-OCT-2003
DEFINITION survey sequence.
ACCESSION CG780524
VERSION CG780524.1 GI:38041313
KEYWORDS GSS.
SOURCE Zea mays
ORGANISM Zea mays
REFERENCE
AUTHORS Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
TITLE Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; PACCAD
JOURNAL clade; Panicoideae; Andropogoneae; Zea.
1 (bases 1 to 133)
Walbot, V.
Maize genomic sequences found using engineered RescueMu transposon
Unpublished (2001)
Contact: Walbot V

```

```

Department of Biological Sciences
Stanford University
855 California Ave, Palo Alto, CA 94304, USA
Tel: 650 723 2227
Fax: 650 725 8221
Email: walbot@stanford.edu
Plate: 1123040 row: 15
Class: transposon-tagged.
Location/Qualifiers
1. .133
/organism="Zea mays"
/mol_type="genomic DNA"
/cultivar="mixed background W23/A188/B73/K55"
/db_xref="taxon:4577"
/tissue_type="leaf"
/dev stage="adult"
/lab host="DH10B"
/clone_lib="1123 - RescueMu Grid L"
/notes="Organ: leaf; Vector: RescueMu (engineered from pBluescript backbone); Site 1: BamHI; Site 2: BglII; RescueMu is a 4.9 kb, modified maize Mu transposon designed to allow plasmid rescue from total genomic DNA. Mu elements insert preferentially into transcription units. For more information on RescueMu, go to the web site 'www.zmdb.iastate.edu' and follow the links for 'RescueMu.' Grid L was grown in Molokai in 2001. DNA was extracted from leaf strips, double digested using BamHI and BglII, and ligated to form circular plasmids. DH10B cells were transformed and then screened on LB plates with ampicillin."

ORIGIN
Query Match 100.0%; Score 10; DB 9; Length 133;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
|||||
Db 83 CGAACGTTTCG 74

RESULT 39
CV019988
LOCUS 140 bp mRNA linear EST 19-AUG-2004
DEFINITION tbt_009482 Normalized Nicotiana tabacum cDNA library Nicotiana
tabacum cDNA clone tbt_009482 5', mRNA sequence.
ACCESSION CV019988
VERSION CV019988.1 GI:51461496
KEYWORDS EST.
SOURCE Nicotiana tabacum (common tobacco)
ORGANISM Nicotiana tabacum
REFERENCE
AUTHORS Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
TITLE Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots;
JOURNAL asterids; lamids; Solanales; Solanaceae; Nicotiana.
1 (bases 1 to 140)
Li, W.Z., Shao, Y., Li, Y.P., Lu, X.P., Montero, D.C., Alvarez, S.P.,
Deng, Y., Jin, Q.C., Wang, S., Dai, C.E., Zeng, Z.L., Wang, Y.Q.,
Dong, H.T. and Li, D.B.
Large-scale identification of ESTs from Nicotiana tabacum by
normalized cDNA library sequencing
Unpublished (2004)
Contact: Wenzheng Li, Yan Shao, Yongping Li, Xiuping Lu, Limin
Song, Haitao Dong, Debao Li
The Tobacco Science Research Institute of Yunnan Province; Yunnan
Provincial Tobacco Group Dali Branch; Bioinformatics and Gene
Network Research Group, Zhejiang University
The Tobacco Science Research Institute of Yunnan Province, Yuxi
653100, China
Email: webmaster@estarray.org, URL: http://www.estarray.org
Only the high quality region of sequence was submitted.
Seq primer: M13.
Location/Qualifiers
1. .140

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/organism="Nicotiana tabacum"
/mol_type="mRNA"
/db_xref="taxon:4097"
/clone="tbt_009482"
/tissue_type="Mixed"
/clone_lib="Normalized Nicotiana tabacum cDNA library"
/note="Vector: pBS-SK+"

ORIGIN
Query Match      100.0%; Score 10; DB 7; Length 140;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
    |||||
Db 58 CGAACGTTTCG 67

RESULT 40
CV019988/c
LOCUS
DEFINITION
tbt_009482 Normalized Nicotiana tabacum cDNA library Nicotiana
tabacum cDNA clone tbt_009482 5', mRNA sequence.
ACCESSION
VERSION
SOURCE
CV019988.1 GI:51461496
Nicotiana tabacum (common tobacco)
ORGANISM
Nicotiana tabacum
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots;
asterids; lamids; Solanales; Solanaceae; Nicotiana.
REFERENCE
1 (bases 1 to 140)
AUTHORS
Li, W.Z., Shao, Y., Li, Y.P., Lu, X.P., Montero, D.C., Alvarez, S.P.,
Deng, Y., Jin, Q.C., Wang, S., Dai, C.E., Zeng, Z.L., Wang, Y.Q.,
Dong, H.T. and Li, D.B.
TITLE
Large-scale identification of ESTs from Nicotiana tabacum by
normalized cDNA library sequencing
JOURNAL
Unpublished (2004)
COMMENT
Contact: Wenzheng Li, Yan Shao, Yongping Li, Xiuping Lu, Limin
Song, Haitao Dong, Debao Li
The Tobacco Science Research Institute of Yunnan Province; Yunnan
Provincial Tobacco Group Dali Branch; Bioinformatics and Gene
Network Research Group, Zhejiang University
The Tobacco Science Research Institute of Yunnan Province, Yuxi
653100, China
Email: webmaster@estarray.org, URL: http://www.estarray.org
Only the high quality region of sequence was submitted.
Seq primer: M13.
FEATURES
Location/Qualifiers
source
1..140
/organism="Nicotiana tabacum"
/mol_type="mRNA"
/db_xref="taxon:4097"
/clone="tbt_009482"
/tissue_type="Mixed"
/clone_lib="Normalized Nicotiana tabacum cDNA library"
/note="Vector: pBS-SK+"

ORIGIN
Query Match      100.0%; Score 10; DB 7; Length 140;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
    |||||
Db 67 CGAACGTTTCG 58

RESULT 41
CV0720290
LOCUS
DEFINITION
tai41h07.y1 HyEch JUMY T1 Hydractinia echinata cDNA 5', mRNA
sequence.
ACCESSION
VERSION
SOURCE
CV0720290
Hydractinia echinata
Eukaryota; Metazoa; Cnidaria; Hydrozoa; Hydrozoa; Anthomedusae;
Hydractiniidae; Hydractinia.
REFERENCE
1 (bases 1 to 148)
AUTHORS
Bode, H., Blumberg, B., Steele, R., Wigge, P., Gee, L., Nguyen, Q.,
Martinez, D., Kibler, D., Hampson, S., Clifton, S., Pape, D., Marra, M.,
Hillier, L., Martin, J., Wylie, T., Dante, M., Theising, B., Bowers, Y.,
Gibbons, M., Ritter, E., Bennett, J., Ronko, L., Tsagarishvili, R.,
Maguire, L., Kennedy, S., Waterston, R. and Wilson, R.
WashU Hydra EST Project
Unpublished (2002)
Contact: Hans Bode
WashU Hydra EST Project
Washington University School of Medicine
4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108, USA
Tel: 314 286 1800
Fax: 314 286 1810
Email: est@watson.wustl.edu
Library was constructed by Marcus Frohme and Uri Frank Library
materials provided by Marcus Frohme, German Cancer Research
Center (DKFZ) Heidelberg, Uri Frank, University of Heidelberg
Library re-arrayed by Jorge Sozaried (DKFZ) DNA sequencing by:
Washington University Genome Sequencing Center For information on
obtaining a clone please contact: Hans Bode (hrobode@uci.edu)
Seq primer: -40RP from Gibco
High quality sequence stop: 148.
FEATURES
Location/Qualifiers
source
1..148
/organism="Hydractinia echinata"
/mol_type="mRNA"
/db_xref="taxon:35630"
/lab_host="DH10B"
/clone_lib="HyEch JUMY T1"
/note="Vector: pSPORT1; Site 1: Not I; Site 2: Sal I; A
pool of mRNA was primed with an anchored oligo-dT adaptor
with a Not I site for 1st strand synthesis. Double
stranded cDNA was ligated to Sal-Adaptors and cut with
NotI. After size selection (without radioactivity) cDNA
was ligated into pSPORT with SalI/NotI termini.
Transformation was in DH10B Electromax T1 phage resistant
cells. Plating was on 2YT/Carbenicillin Agar and 14x384
cells were blue/white selected automatically picked into
2YT/HMFWM/Carbenicillin (HMFWM is a freezing additive)."

ORIGIN
Query Match      100.0%; Score 10; DB 7; Length 148;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
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Db 42 CGAACGTTTCG 51

RESULT 42
CV0720290/c
LOCUS
DEFINITION
tai41h07.y1 HyEch JUMY T1 Hydractinia echinata cDNA 5', mRNA
sequence.
ACCESSION
VERSION
SOURCE
CV0720290
Hydractinia echinata
Eukaryota; Metazoa; Cnidaria; Hydrozoa; Hydrozoa; Anthomedusae;
Hydractiniidae; Hydractinia.
REFERENCE
1 (bases 1 to 148)
AUTHORS
Bode, H., Blumberg, B., Steele, R., Wigge, P., Gee, L., Nguyen, Q.,
Martinez, D., Kibler, D., Hampson, S., Clifton, S., Pape, D., Marra, M.,

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ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
Hydractinia echinata
Eukaryota; Metazoa; Cnidaria; Hydrozoa; Hydrozoa; Anthomedusae;
Hydractiniidae; Hydractinia.
REFERENCE
1 (bases 1 to 148)
AUTHORS
Bode, H., Blumberg, B., Steele, R., Wigge, P., Gee, L., Nguyen, Q.,
Martinez, D., Kibler, D., Hampson, S., Clifton, S., Pape, D., Marra, M.,
Hillier, L., Martin, J., Wylie, T., Dante, M., Theising, B., Bowers, Y.,
Gibbons, M., Ritter, E., Bennett, J., Ronko, L., Tsagarishvili, R.,
Maguire, L., Kennedy, S., Waterston, R. and Wilson, R.
WashU Hydra EST Project
Unpublished (2002)
Contact: Hans Bode
WashU Hydra EST Project
Washington University School of Medicine
4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108, USA
Tel: 314 286 1800
Fax: 314 286 1810
Email: est@watson.wustl.edu
Library was constructed by Marcus Frohme and Uri Frank Library
materials provided by Marcus Frohme, German Cancer Research
Center (DKFZ) Heidelberg, Uri Frank, University of Heidelberg
Library re-arrayed by Jorge Sozaried (DKFZ) DNA sequencing by:
Washington University Genome Sequencing Center For information on
obtaining a clone please contact: Hans Bode (hrobode@uci.edu)
Seq primer: -40RP from Gibco
High quality sequence stop: 148.
FEATURES
Location/Qualifiers
source
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/organism="Hydractinia echinata"
/mol_type="mRNA"
/db_xref="taxon:35630"
/lab_host="DH10B"
/clone_lib="HyEch JUMY T1"
/note="Vector: pSPORT1; Site 1: Not I; Site 2: Sal I; A
pool of mRNA was primed with an anchored oligo-dT adaptor
with a Not I site for 1st strand synthesis. Double
stranded cDNA was ligated to Sal-Adaptors and cut with
NotI. After size selection (without radioactivity) cDNA
was ligated into pSPORT with SalI/NotI termini.
Transformation was in DH10B Electromax T1 phage resistant
cells. Plating was on 2YT/Carbenicillin Agar and 14x384
cells were blue/white selected automatically picked into
2YT/HMFWM/Carbenicillin (HMFWM is a freezing additive)."

ORIGIN
Query Match      100.0%; Score 10; DB 7; Length 148;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
    |||||
Db 42 CGAACGTTTCG 51

RESULT 42
CV0720290/c
LOCUS
DEFINITION
tai41h07.y1 HyEch JUMY T1 Hydractinia echinata cDNA 5', mRNA
sequence.
ACCESSION
VERSION
SOURCE
CV0720290
Hydractinia echinata
Eukaryota; Metazoa; Cnidaria; Hydrozoa; Hydrozoa; Anthomedusae;
Hydractiniidae; Hydractinia.
REFERENCE
1 (bases 1 to 148)
AUTHORS
Bode, H., Blumberg, B., Steele, R., Wigge, P., Gee, L., Nguyen, Q.,
Martinez, D., Kibler, D., Hampson, S., Clifton, S., Pape, D., Marra, M.,

```

Hillier,L., Martin,J., Wylie,T., Dante,M., Theising,B., Bowers,Y., Gibbons,M., Ritter,E., Bennett,J., Ronko,I., Tsagareishvili,R., Maguire,L., Kennedy,S., Waterston,R. and Wilson,R.
WashU Hydra EST Project
Unpublished (2002)

TITLE JOURNAL COMMENT

Contact: Hans Bode
WashU Hydra EST Project
Washington University School of Medicine
4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108, USA
Tel: 314 286 1800
Fax: 314 286 1810

Email: est@watson.wustl.edu
Library was constructed by Marcus Frohme and Uri Frank Library materials provided by Marcus Frohme, German Cancer Research Center (DKFZ) Heidelberg, Uri Frank, University of Heidelberg Library re-arrayed by Jorge Sozaried (DKFZ) DNA sequencing by: Washington University Genome Sequencing Center For information on obtaining a clone please contact: Hans Bode (hrobode@uci.edu)
Seq primer: -40RP from Gibco
High quality sequence stop: 148.

FEATURES

Location/Qualifiers
source

1..148
/organism="Hydractinia echinata"
/mol_type="mRNA"
/db_xref="taxon:35630"
/lab_host="DH10B"
/clone_lib="HybEch JUMY T1"

/note="vector: pSPOR1; Site_1: Not I; Site_2: Sal I; A pool of mRNA was primed with an anchored oligo-dT adaptor with a Not I site for 1st strand synthesis. Double stranded cDNA was ligated to Sal-Adaptors and cut with NotI. After size selection (without radioactivity) cDNA was ligated into pSport with SalI/NotI termini. Transformation was in DH10B Electromax TI phage resistant cells. Plating was on 2YT/Carbenicillin Agar and 14x384 cells were blue/white selected automatically picked into 2YT/HMPM/Carbenicillin (HMPM is a freezing additive)."

ORIGIN

Query Match 100.0%; Score 10; DB 7; Length 148;

Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10

Db 51 CGAACGTTTCG 42

RESULT 43

BH392000

LOCUS BH392000 150 bp DNA linear GSS 11-DEC-2001
DEFINITION AG-ND-143H5.TF ND-TAM Anopheles gambiae genomic clone AG-ND-143H5, genomic survey sequence.

ACCESSION BH392000

VERSION BH392000.1 GI:17338141

KEYWORDS GSS.

SOURCE Anopheles gambiae (African malaria mosquito)

ORGANISM Anopheles gambiae

Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota; Neoptera; Endopterygota; Diptera; Nematocera; Culicoidea; Anopheles.

1 (bases 1 to 150)

Hong,Y.S., Hogan,J.R., Wang,X., Sarkar,A., Sim,C., Loftus,B.J., Ren,C., Huff,E.R., Carlile,J.L., Black,K., Zhang,H.-B., Gardner,M.J. and Collins,F.H.
Construction of a BAC library and generation of BAC end

sequence-tagged connectors for genome sequencing of the African malaria mosquito Anopheles gambiae
Mol. Genet. Genomics 268 (6), 720-728 (2003)
22542063

PUBLISHED 12655398

COMMENT

Contact: Brendan J Loftus
Department of Eukaryotic Genomics

The Institute for Genomic Research
9712 Medical Center Dr., Rockville, MD 20850, USA
Tel: 301 838 0208
Fax: 301 838 3543
Email: bjloftus@tigr.org

This clone is from an A. gambiae BAC library (ND-TAM) provided by F.H. Collins and sequenced by The Institute for Genomic Research (TIGR). The BAC library was generated from A. gambiae PEST strain DNA. All DNA was extracted from newly hatched first instar larvae to minimize the inclusion of DNA from microorganisms that inhabit the gut. The DNA is derived from mixed sexes of larvae. The BAC library was constructed at Texas A&M University BAC Center University, College Station, Texas 77843-2123, USA using a HindIII partial digest.

Seq primer: M13 For

Class: BAC ends.

FEATURES
source

Location/Qualifiers
1..150
/organism="Anopheles gambiae"
/mol_type="genomic DNA"
/strain="PEST"
/db_xref="taxon:7165"
/clone="AG-ND-143H5"
/clone_lib="ND-TAM"
/note="Vector: pECBAC1; Site_1: HindIII"

ORIGIN

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Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10

Db 88 CGAACGTTTCG 97

RESULT 44

BH392000/c

LOCUS BH392000 150 bp DNA linear GSS 11-DEC-2001
DEFINITION AG-ND-143H5.TF ND-TAM Anopheles gambiae genomic clone AG-ND-143H5, genomic survey sequence.

ACCESSION BH392000

VERSION BH392000.1 GI:17338141

KEYWORDS GSS.

SOURCE Anopheles gambiae (African malaria mosquito)

Anopheles gambiae
Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota; Neoptera; Endopterygota; Diptera; Nematocera; Culicoidea; Anopheles.

1 (bases 1 to 150)

Hong,Y.S., Hogan,J.R., Wang,X., Sarkar,A., Sim,C., Loftus,B.J., Ren,C., Huff,E.R., Carlile,J.L., Black,K., Zhang,H.-B., Gardner,M.J. and Collins,F.H.
Construction of a BAC library and generation of BAC end

sequence-tagged connectors for genome sequencing of the African malaria mosquito Anopheles gambiae
Mol. Genet. Genomics 268 (6), 720-728 (2003)
22542063

JOURNAL MEDLINE

PUBLISHED 12655398

COMMENT

Contact: Brendan J Loftus
Department of Eukaryotic Genomics
The Institute for Genomic Research
9712 Medical Center Dr., Rockville, MD 20850, USA
Tel: 301 838 0208
Fax: 301 838 3543
Email: bjloftus@tigr.org

This clone is from an A. gambiae BAC library (ND-TAM) provided by F.H. Collins and sequenced by The Institute for Genomic Research (TIGR). The BAC library was generated from A. gambiae PEST strain DNA. All DNA was extracted from newly hatched first instar larvae to minimize the inclusion of DNA from microorganisms that inhabit the gut. The DNA is derived from mixed sexes of larvae. The BAC library was constructed at Texas A&M University BAC Center

University, College Station, Texas 77843-2123, USA using a HindIII partial digest.
Seq primer: M13 For
Class: BAC ends.

FEATURES

Location/Qualifiers
1..150
/organism="Anopheles gambiae"
/mol_type="genomic DNA"
/strain="PEST"
/db_xref="taxon:7165"
/clone="AG-ND-143H5"
/clone_lib="ND-TAM"
/note="Vector: pECBAC1; Site_1: HindIII"

ORIGIN

Query Match 100.0%; Score 10; DB 8; Length 150;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 CGAACGTTTCG 10
Db 97 CGAACGTTTCG 88

RESULT 45
BF883579
LOCUS 152 bp mRNA linear EST 17-JAN-2001
DEFINITION QV1-ET0180-111200-563-c01 ET0180 Homo sapiens cDNA, mRNA sequence.
ACCESSION BF883579
VERSION BF883579.1 GI:12273705
KEYWORDS EST.
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens

REFERENCE
AUTHORS
Dias Neto, E., Garcia Correa, R., Verjovski-Almeida, S., Briones, M.R., Nagai, M.A., da Silva, W. Jr., Zago, M.A., Bordin, S., Costa, F.F., Goldman, G.H., Carvalho, A.F., Mateukuma, A., Baia, G.S., Simpson, D.H., Brunstein, A., deOliveira, P.S., Bucher, P., Jongeneel, C.V., O'Hare, M.J., Soares, F., Brentani, R.R., Reis, L.F., de Souza, S.J. and Simpson, A.J.
Shotgun sequencing of the human transcriptome with ORF expressed sequence tags
Proc. Natl. Acad. Sci. U.S.A. 97 (7), 3491-3496 (2000)
20202663
MEDLINE 10737800
PUBMED 10737800
COMMENT
Contact: Simpson A.J.G.
Laboratory of Cancer Genetics
Ludwig Institute for Cancer Research
Rua Prof. Antonio Prudente 109, 4 andar, 01509-010, Sao Paulo-SP, Brazil
Tel: +55-11-2704922
Fax: +55-11-2707001
Email: asimpson@ludwig.org.br
This sequence was derived from the FAPESP/LICR Human Cancer Genome Project. This entry can be seen in the following URL
(http://www.ludwig.org.br/scripts/gethtml2.pl?tl=QV1&t2=QV1-ET0180-111200-563-c01&t3=2000-12-11&t4=1)
Seq primer: puc 18 forward
High quality sequence stop: 152.

FEATURES

Location/Qualifiers
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/organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/dev_stage="Adult"
/clone_lib="ET0180"
/note="Organ: lung_tumor; Vector: puc18; Site_1: SmaI; Site_2: SmaI; A mini-library was made by cloning products derived from ORESTES PCR (U.S. Letters Patent application No. 196,716 - Ludwig Institute for Cancer Research)

profiles into the pUC 18 vector. Reverse transcription of tissue mRNA and cDNA amplification were performed under low stringency conditions."

ORIGIN

Query Match 100.0%; Score 10; DB 2; Length 152;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 CGAACGTTTCG 10
Db 65 CGAACGTTTCG 74

RESULT 46

BF883579/c
LOCUS 152 bp mRNA linear EST 17-JAN-2001
DEFINITION QV1-ET0180-111200-563-c01 ET0180 Homo sapiens cDNA, mRNA sequence.
ACCESSION BF883579
VERSION BF883579.1 GI:12273705
KEYWORDS EST.
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens

REFERENCE
AUTHORS
Dias Neto, E., Garcia Correa, R., Verjovski-Almeida, S., Briones, M.R., Nagai, M.A., da Silva, W. Jr., Zago, M.A., Bordin, S., Costa, F.F., Goldman, G.H., Carvalho, A.F., Mateukuma, A., Baia, G.S., Simpson, D.H., Brunstein, A., deOliveira, P.S., Bucher, P., Jongeneel, C.V., O'Hare, M.J., Soares, F., Brentani, R.R., Reis, L.F., de Souza, S.J. and Simpson, A.J.
Shotgun sequencing of the human transcriptome with ORF expressed sequence tags
Proc. Natl. Acad. Sci. U.S.A. 97 (7), 3491-3496 (2000)
20202663
MEDLINE 10737800
PUBMED 10737800
COMMENT
Contact: Simpson A.J.G.
Laboratory of Cancer Genetics
Ludwig Institute for Cancer Research
Rua Prof. Antonio Prudente 109, 4 andar, 01509-010, Sao Paulo-SP, Brazil
Tel: +55-11-2704922
Fax: +55-11-2707001
Email: asimpson@ludwig.org.br
This sequence was derived from the FAPESP/LICR Human Cancer Genome Project. This entry can be seen in the following URL
(http://www.ludwig.org.br/scripts/gethtml2.pl?tl=QV1&t2=QV1-ET0180-111200-563-c01&t3=2000-12-11&t4=1)
Seq primer: puc 18 forward
High quality sequence stop: 152.

FEATURES

Location/Qualifiers
1..152
/organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/dev_stage="Adult"
/clone_lib="ET0180"
/note="Organ: lung_tumor; Vector: puc18; Site_1: SmaI; Site_2: SmaI; A mini-library was made by cloning products derived from ORESTES PCR (U.S. Letters Patent application No. 196,716 - Ludwig Institute for Cancer Research)
profiles into the pUC 18 vector. Reverse transcription of tissue mRNA and cDNA amplification were performed under low stringency conditions."

ORIGIN

Query Match 100.0%; Score 10; DB 2; Length 152;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 CGAACGTTTCG 10

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Db          74 CGAACGTTTCG 65
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RESULT 47
CK912893
LOCUS      153 bp      mRNA      linear      EST 22-APR-2004
DEFINITION e3fmg_001952 Normalized Magnaporthe grisea cDNA pGEM-T Easy library
Magnaporthe grisea cDNA clone e3fmg_001952, mRNA sequence.
ACCESSION CK912893
VERSION    CK912893.1 GI:45371598
KEYWORDS   EST.
SOURCE     Magnaporthe grisea (anamorph: Pyricularia grisea)
ORGANISM   Magnaporthe grisea
            Eukaryota; Fungi; Ascomycota; Pezizomycotina; Sordariomycetes;
            Sordariomycetes incertae sedis; Magnaporthaceae; Magnaporthe.
            1 (bases 1 to 153)
            Chen, B., Li, Y., Peng, Y., Dong, H. and Li, D.
            Large-scale identification of ESTs from Magnaporthe grisea by
            normalized cDNA library sequencing
            Unpublished (2004)
JOURNAL
COMMENT    Contact: Baoshan Chen, Youzhi Li
            Laboratory of Subtropical Bioresource Conservation and Utilization
            Guangxi University, China Agricultural University, Zhejiang
            University
            Daxue Road 100#, Nanning, Guangxi, 530004, China
            Tel: 0086-771-3239566
            Fax: 0086-771-3237873
            Email: chenbs@nn.gx.cninfo.net, URL: http://www.estarray.org
            Seq primer: M13 forward primer.
            Location/Qualifiers
            1..153
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            /mol_type="mRNA"
            /db_xref="taxon:148305"
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            swelling appressorium, mature appressorium, penetration
            peg"
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            swelling appressorium, mature appressorium, penetration
            peg"
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            library"
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FEATURES             source
    Query Match      100.0%; Score 10; DB 7; Length 153;
    Best Local Similarity 100.0%; Pred. No. 1.1e+04;
    Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy          1 CGAACGTTTCG 10
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Db          37 CGAACGTTTCG 46
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RESULT 48
CK912893/c
LOCUS      153 bp      mRNA      linear      EST 19-AUG-2004
DEFINITION tbt_009281 Normalized Nicotiana tabacum cDNA library Nicotiana
tabacum cDNA clone tbt_009281 5', mRNA sequence.
ACCESSION CK912893
VERSION    CK912893.1 GI:51462983
KEYWORDS   EST.
SOURCE     Nicotiana tabacum (common tobacco)
ORGANISM   Nicotiana tabacum
            Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
            Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots;
            asterids; lamids; Solanales; Solanaceae; Nicotiana.
            1 (bases 1 to 155)
            Li, W.Z., Shao, Y., Li, Y.P., Lu, X.P., Montero, D.C., Alvarez, S.P.,
            Deng, Y., Jin, Q.C., Wang, S., Dai, C.E., Zeng, Z.L., Wang, Y.Q.,
            Dong, H.T. and Li, D.B.
            Large-scale identification of ESTs from Nicotiana tabacum by
            normalized cDNA library sequencing
            Unpublished (2004)
JOURNAL
COMMENT    Contact: Wenzheng Li, Yan Shao, Yongping Li, Xiuping Lu, Limin
            Song, Haitao Dong, Debao Li
            The Tobacco Science Research Institute of Yunnan Province; Yunnan
            Provincial Tobacco Group Dali Branch; Bioinformatics and Gene
            Network Research Group, Zhejiang University
            The Tobacco Science Research Institute of Yunnan Province, Yuxi
            653100, China
            Email: webmaster@estarray.org, URL: http://www.estarray.org
            Only the high quality region of sequence was submitted.
            Seq primer: M13.
            Location/Qualifiers
            1..155
            /organism="Nicotiana tabacum"
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            /db_xref="taxon:4097"
            /clone="tbt_009281"
            /tissue_type="Mixed"
            /clone_lib="Normalized Nicotiana tabacum cDNA library"
            Unpublished (2004)

```

```

COMMENT
Contact: Baoshan Chen, Youzhi Li
Laboratory of Subtropical Bioresource Conservation and Utilization
Guangxi University, China Agricultural University, Zhejiang
University
Daxue Road 100#, Nanning, Guangxi, 530004, China
Tel: 0086-771-3239566
Fax: 0086-771-3237873
Email: chenbs@nn.gx.cninfo.net, URL: http://www.estarray.org
Seq primer: M13 forward primer.
Location/Qualifiers
1..153
/organism="Magnaporthe grisea"
/mol_type="mRNA"
/db_xref="taxon:148305"
/clone="e3fmg_001952"
/tissue_type="Myceium, conidium, germinating conidium,
swelling appressorium, mature appressorium, penetration
peg"
/dev_stage="Myceium, conidium, germinating conidium,
swelling appressorium, mature appressorium, penetration
peg"
/clone_lib="Normalized Magnaporthe grisea cDNA pGEM-T Easy
library"
/note="Vector: pGEM-T Easy"
ORIGIN
Query Match      100.0%; Score 10; DB 7; Length 153;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy          1 CGAACGTTTCG 10
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Db          46 CGAACGTTTCG 37
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RESULT 49
CV021475
LOCUS      155 bp      mRNA      linear      EST 19-AUG-2004
DEFINITION tbt_009281 Normalized Nicotiana tabacum cDNA library Nicotiana
tabacum cDNA clone tbt_009281 5', mRNA sequence.
ACCESSION CV021475
VERSION    CV021475.1 GI:51462983
KEYWORDS   EST.
SOURCE     Nicotiana tabacum (common tobacco)
ORGANISM   Nicotiana tabacum
            Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
            Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots;
            asterids; lamids; Solanales; Solanaceae; Nicotiana.
            1 (bases 1 to 155)
            Li, W.Z., Shao, Y., Li, Y.P., Lu, X.P., Montero, D.C., Alvarez, S.P.,
            Deng, Y., Jin, Q.C., Wang, S., Dai, C.E., Zeng, Z.L., Wang, Y.Q.,
            Dong, H.T. and Li, D.B.
            Large-scale identification of ESTs from Nicotiana tabacum by
            normalized cDNA library sequencing
            Unpublished (2004)
JOURNAL
COMMENT    Contact: Wenzheng Li, Yan Shao, Yongping Li, Xiuping Lu, Limin
            Song, Haitao Dong, Debao Li
            The Tobacco Science Research Institute of Yunnan Province; Yunnan
            Provincial Tobacco Group Dali Branch; Bioinformatics and Gene
            Network Research Group, Zhejiang University
            The Tobacco Science Research Institute of Yunnan Province, Yuxi
            653100, China
            Email: webmaster@estarray.org, URL: http://www.estarray.org
            Only the high quality region of sequence was submitted.
            Seq primer: M13.
            Location/Qualifiers
            1..155
            /organism="Nicotiana tabacum"
            /mol_type="mRNA"
            /db_xref="taxon:4097"
            /clone="tbt_009281"
            /tissue_type="Mixed"
            /clone_lib="Normalized Nicotiana tabacum cDNA library"
            Unpublished (2004)

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ORIGIN
Query Match      100.0%; Score 10; DB 7; Length 155;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 21 CGAACGTTTCG 30

RESULT 50
CV021475/c
LOCUS
DEFINITION tbt_009281 Normalized Nicotiana tabacum cDNA library EST 19-AUG-2004
tabacum cDNA clone tbt_009281 5', mRNA sequence.
ACCESSION CV021475
VERSION CV021475.1 GI:51462983
KEYWORDS EST.
SOURCE Nicotiana tabacum (common tobacco)
ORGANISM Nicotiana tabacum
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; eudicotyledons; Core eudicots;
asterids; lamids; Solanales; Solanaceae; Nicotiana.
REFERENCE 1 (bases 1 to 155)
AUTHORS Li, W.Z., Shao, Y., Li, Y.P., Lu, X.P., Montero, D.C., Alvarez, S.P.,
Deng, Y., Jin, Q.C., Wang, S., Dai, C.E., Zeng, Z.L., Wang, Y.Q.,
Dong, H.T. and Li, D.B.
TITLE Large-scale identification of ESTs from Nicotiana tabacum by
normalized cDNA library sequencing
JOURNAL Unpublished (2004)
COMMENT Contact: Wenzheng Li, Yan Shao, Yongping Li, Xiuping Lu, Limin
Song, Haitao Dong, Debao Li
The Tobacco Science Research Institute of Yunnan Province; Yunnan
Provincial Tobacco Group Dali Branch; Bioinformatics and Gene
Network Research Group, Zhejiang University
The Tobacco Science Research Institute of Yunnan Province, Yuxi
653100, China
Email: webmaster@estarray.org, URL: http://www.estarray.org
Only the high quality region of sequence was submitted.
Seq primer: M13.
FEATURES
source
Location/Qualifiers
1..155
/mol_type="mRNA"
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/clone="tbt_009281"
/tissue_type="Mixed"
/clone_lib="Normalized Nicotiana tabacum cDNA library"
/note="Vector: pBS-SK+"

ORIGIN
Query Match      100.0%; Score 10; DB 7; Length 155;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 30 CGAACGTTTCG 21

RESULT 51
BH226212
LOCUS
DEFINITION BH226212 155 bp DNA linear GSS 08-NOV-2001
survey sequence.
ACCESSION BH226212
VERSION BH226212.1 GI:16824960
KEYWORDS GSS.
SOURCE Zea mays
ORGANISM Zea mays
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; PACCAD
clade; Panicoideae; Andropogoneae; Zea.
REFERENCE 1 (bases 1 to 155)
AUTHORS Walbot, V.
TITLE Zea genomic sequences found using engineered RescueMu transposon
JOURNAL Unpublished (2001)
COMMENT Contact: Walbot V
Department of Biological Sciences
Stanford University
855 California Ave, Palo Alto, CA 94304, USA
Tel: 650 723 2227
Fax: 650 723 8221

```

```

REFERENCE
AUTHORS Walbot, V.
TITLE Zea genomic sequences found using engineered RescueMu transposon
JOURNAL Unpublished (2001)
COMMENT Contact: Walbot V
Department of Biological Sciences
Stanford University
855 California Ave, Palo Alto, CA 94304, USA
Tel: 650 723 2227
Fax: 650 723 8221
Email: walbot@stanford.edu
Possible ligation site so sequence was trimmed. Post-ligation
sequence submitted separately.
Plate: 1006130 row: 11
Class: transposon-tagged.
FEATURES
source
Location/Qualifiers
1..155
/organism="Zea mays"
/mol_type="genomic DNA"
/cultivar="mixed background W23/A188/B73"
/db_xref="taxon:4577"
/tissue_type="leaf"
/dev_stage="adult"
/lab_host="DH10B"
/clone_lib="1006 - RescueMu Grid G"
/note="Organ: leaf; Vector: RescueMu (engineered from
pBluescript backbone); Site 1: BamHI; Site 2: BglII;
RescueMu is a 4.9 kb, modified maize Mu transposon
designed to allow plasmid rescue from total genomic DNA.
Mu elements insert preferentially into transcription
units. For more information on RescueMu, go to the web
site 'www.zmdb.iastate.edu' and follow the links for
'RescueMu.' Grid G was grown at Stanford in 2000. DNA was
extracted from leaf punches, double digested using BamHI
and BglII, and ligated to form circular plasmids. DH10B
cells were transformed and then screened on LB plates with
ampicillin."

ORIGIN
Query Match      100.0%; Score 10; DB 8; Length 155;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 21 CGAACGTTTCG 30

RESULT 52
BH226212/c
LOCUS
DEFINITION BH226212 155 bp DNA linear GSS 08-NOV-2001
survey sequence.
ACCESSION BH226212
VERSION BH226212.1 GI:16824960
KEYWORDS GSS.
SOURCE Zea mays
ORGANISM Zea mays
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; PACCAD
clade; Panicoideae; Andropogoneae; Zea.
REFERENCE 1 (bases 1 to 155)
AUTHORS Walbot, V.
TITLE Zea genomic sequences found using engineered RescueMu transposon
JOURNAL Unpublished (2001)
COMMENT Contact: Walbot V
Department of Biological Sciences
Stanford University
855 California Ave, Palo Alto, CA 94304, USA
Tel: 650 723 2227
Fax: 650 723 8221

```

Email: walbot@stanford.edu
 Possible ligation site so sequence was trimmed. Post-ligation
 sequence submitted separately.
 Plate: 1006130 row: 11
 Class: transposon-tagged.

FEATURES

```

source
1. .155
  Location/Qualifiers
    organism="Zea mays"
    mol_type="genomic DNA"
    cultivar="mixed background W23/Al88/B73"
    db_xref="taxon:4577"
    tissue_type="leaf"
    dev_stage="adult"
    lab_host="DH10B"
    clone_lib="1006 - RescueMu Grid G"
    notes="Organ: leaf; Vector: RescueMu (engineered from
    pBluescript backbone); Site_1: BamHI; Site_2: BglII;
    RescueMu is a 4.9 kb, modified maize Mu transposon
    designed to allow plasmid rescue from total genomic DNA.
    Mu elements insert preferentially into transcription
    units. For more information on RescueMu, go to the web
    site 'www.zmdb.tastate.edu' and follow the links for
    'RescueMu.' Grid G was grown at Stanford in 2000. DNA was
    extracted from leaf punches, double digested using BamHI
    and BglII, and ligated to form circular plasmids. DH10B
    cells were transformed and then screened on LB plates with
    ampicillin."

```

ORIGIN

```

Query Match      100.0%; Score 10; DB 8; Length 155;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

Qy 1 CGAACGTTTCG 10
    |||||
Db 30 CGAACGTTTCG 21

```

RESULT 53

```

BP539423
LOCUS      157 bp mRNA linear EST 29-JUL-2004
DEFINITION Beebrain-p5E3_E03_09.seq, mRNA sequence.
ACCESSION BP539423
VERSION BP539423.1 GI:42537560
KEYWORDS EST.
SOURCE Apis mellifera (honey bee)
ORGANISM Apis mellifera
          Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
          Neoptera; Endopterygota; Hymenoptera; Apocrita; Apoidea; Apoidea;
          Apidae; Apis.

```

REFERENCE

```

1 (bases 1 to 157)
Takeuchi,H., Fujiyuki,T., Shirai,K., Matsuo,Y., Kamikouchi,A.,
Fujinawa,Y., Kato,A., Tsujimoto,A. and Kubo,T.
Identification of genes expressed preferentially in the honeybee
mushroom bodies by combination of differential display and cDNA
microarray

```

```

JOURNAL FEBS Lett. 513 (2-3), 230-234 (2002)
MEDLINE 21901088
PUBMED 11904156
COMMENT Contact: Hideaki Takeuchi
          University of Tokyo
          Hongo 7-3-1, Bunkyo-ku, Tokyo 113-0003, Japan
          Tel: 81-3-5841-4448
          Fax: 81-3-5841-4448
          Email: takeuchi@biol.s.u-tokyo.ac.jp
          These clones were obtained
          using Differential Display method.
          Location/Qualifiers
            1. .157
              /organism="Apis mellifera"
              /mol_type="mRNA"
              /db_xref="taxon:7460"

```

FEATURES

```

source
1. .157
  Location/Qualifiers
    organism="Apis mellifera"
    mol_type="mRNA"
    db_xref="taxon:7460"

```

ORIGIN

```

Query Match      100.0%; Score 10; DB 5; Length 157;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

Qy 1 CGAACGTTTCG 10
    |||||
Db 48 CGAACGTTTCG 57

```

RESULT 54

```

BP539423/c
LOCUS      157 bp mRNA linear EST 29-JUL-2004
DEFINITION Beebrain-p5E3_E03_09.seq, mRNA sequence.
ACCESSION BP539423
VERSION BP539423.1 GI:42537560
KEYWORDS EST.
SOURCE Apis mellifera (honey bee)
ORGANISM Apis mellifera
          Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
          Neoptera; Endopterygota; Hymenoptera; Apocrita; Apoidea; Apoidea;
          Apidae; Apis.

```

REFERENCE

```

1 (bases 1 to 157)
Takeuchi,H., Fujiyuki,T., Shirai,K., Matsuo,Y., Kamikouchi,A.,
Fujinawa,Y., Kato,A., Tsujimoto,A. and Kubo,T.
Identification of genes expressed preferentially in the honeybee
mushroom bodies by combination of differential display and cDNA
microarray

```

```

JOURNAL FEBS Lett. 513 (2-3), 230-234 (2002)
MEDLINE 21901088
PUBMED 11904156
COMMENT Contact: Hideaki Takeuchi
          University of Tokyo
          Hongo 7-3-1, Bunkyo-ku, Tokyo 113-0003, Japan
          Tel: 81-3-5841-4448
          Fax: 81-3-5841-4448
          Email: takeuchi@biol.s.u-tokyo.ac.jp
          These clones were obtained
          using Differential Display method.
          Location/Qualifiers
            1. .157
              /organism="Apis mellifera"
              /mol_type="mRNA"
              /db_xref="taxon:7460"
              /clone="Beebrain-p5E3_E03_09.seq"
              /tissue_type="brain"
              /dev_stage="adult"
              /clone_lib="Apis mellifera brain adult"

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ORIGIN

```

Query Match      100.0%; Score 10; DB 5; Length 157;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

```

Qy 1 CGAACGTTTCG 10
    |||||
Db 57 CGAACGTTTCG 48

```

RESULT 55

```

AA483257
LOCUS      159 bp mRNA linear EST 18-AUG-1997
DEFINITION nf03901.s1 NCI_CGAP_L11 Homo sapiens cDNA clone IMAGE:912720, mRNA
sequence.
ACCESSION AA483257
VERSION AA483257.1 GI:2212070
KEYWORDS EST.

```

SOURCE Homo sapiens (human)
 ORGANISM Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
 REFERENCE 1 (bases 1 to 159)
 AUTHORS NCI-CGAP <http://www.ncbi.nlm.nih.gov/ncicgap>.
 TITLE National Cancer Institute, Cancer Genome Anatomy Project (CGAP), Tumor Gene Index
 JOURNAL Unpublished (1997)
 COMMENT Contact: Robert Strausberg, Ph.D.
 Email: cgapbs-remail.nih.gov
 Tissue Procurement: David E. Kleiner, M.D., Ph.D., Rodrigo F. Chuqui, M.D., Michael R. Emmert-Buck, M.D., Ph.D.
 cDNA Library Preparation: David B. Krizman, Ph.D.
 DNA Sequencing by: Washington University Genome Sequencing Center
 Clone distribution: NCI-CGAP clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at: www-bio.llnl.gov/bbrp/image/image.html
 Insert Length: 283 Std Error: 0.00
 Seq primer: -41m13 fwd. ET from Amersham.
 Location/Qualifiers
 1..159
 /organism="Homo sapiens"
 /mol_type="mRNA"
 /db_xref="taxon:9606"
 /clone="IMAGE:912720"
 /tissue_type="liver"
 /lab_host="DH10B"
 /clone_lib="NCI-CGAP_L11"
 /note="Vector: pAMP10; mRNA made from normal liver hepatocytes, cDNA made by oligo-dr priming. Non-directionally cloned. Size-selected on agarose gel, average insert size 600 bp. Reference: Krizman et al. (1996) Cancer Research 56:5380-5383."
 www-bio.llnl.gov/bbrp/image/image.html
 Insert Length: 283 Std Error: 0.00
 Seq primer: -41m13 fwd. ET from Amersham.
 Location/Qualifiers
 1..159
 /organism="Homo sapiens"
 /mol_type="mRNA"
 /db_xref="taxon:9606"
 /clone="IMAGE:912720"
 /tissue_type="liver"
 /lab_host="DH10B"
 /clone_lib="NCI-CGAP_L11"
 /note="Vector: pAMP10; mRNA made from normal liver hepatocytes, cDNA made by oligo-dr priming. Non-directionally cloned. Size-selected on agarose gel, average insert size 600 bp. Reference: Krizman et al. (1996) Cancer Research 56:5380-5383."
 ORIGIN
 Query Match 100.0%; Score 10; DB 1; Length 159;
 Best Local Similarity 100.0%; Pred. No. 1.le+04;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 FEATURES source
 Qy 1 CGACGTTTCG 10
 Db 120 CGACGTTTCG 129
 RESULT 56
 LOCUS AA483257/c
 DEFINITION nf03g01.61 NCI-CGAP_L11 Homo sapiens cDNA clone IMAGE:912720, mRNA sequence.
 ACCESSION AA483257
 VERSION AA483257.1 GI:2212070
 KEYWORDS EST.
 SOURCE Homo sapiens (human)
 ORGANISM Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
 REFERENCE 1 (bases 1 to 159)
 AUTHORS NCI-CGAP <http://www.ncbi.nlm.nih.gov/ncicgap>.
 TITLE National Cancer Institute, Cancer Genome Anatomy Project (CGAP), Tumor Gene Index
 JOURNAL Unpublished (1997)
 COMMENT Contact: Robert Strausberg, Ph.D.
 Email: cgapbs-remail.nih.gov
 Tissue Procurement: David E. Kleiner, M.D., Ph.D., Rodrigo F. Chuqui, M.D., Michael R. Emmert-Buck, M.D., Ph.D.
 cDNA Library Preparation: David B. Krizman, Ph.D.
 DNA Sequencing by: Washington University Genome Sequencing Center
 Clone distribution: NCI-CGAP clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at: www-bio.llnl.gov/bbrp/image/image.html

Insert Length: 283 Std Error: 0.00
 Seq primer: -41m13 fwd. ET from Amersham.
 Location/Qualifiers
 1..159
 /organism="Homo sapiens"
 /mol_type="mRNA"
 /db_xref="taxon:9606"
 /clone="IMAGE:912720"
 /tissue_type="liver"
 /lab_host="DH10B"
 /clone_lib="NCI-CGAP_L11"
 /note="Vector: pAMP10; mRNA made from normal liver hepatocytes, cDNA made by oligo-dr priming. Non-directionally cloned. Size-selected on agarose gel, average insert size 600 bp. Reference: Krizman et al. (1996) Cancer Research 56:5380-5383."
 ORIGIN
 Query Match 100.0%; Score 10; DB 1; Length 159;
 Best Local Similarity 100.0%; Pred. No. 1.le+04;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 FEATURES source
 Qy 1 CGACGTTTCG 10
 Db 129 CGACGTTTCG 120
 RESULT 57
 LOCUS BM277474
 DEFINITION Tm ad 40F07_SKPL Trichuris muris (parasitic nematode) mixed adult Trichuris muris cDNA clone Tm_ad_40F07 5', mRNA sequence.
 ACCESSION BM277474
 VERSION BM277474.1 GI:17970713
 KEYWORDS EST.
 SOURCE Trichuris muris
 ORGANISM Trichuris muris
 Eukaryota; Metazoa; Nematoda; Enoplea; Trichocephalida; Trichuridae; Trichuris.
 REFERENCE 1 (bases 1 to 160)
 AUTHORS Blaxter, M.L., Parkinson, J., Whitton, C., Daub, J., Gulliano, D., Hall, N., Quayle, M. and Barrell, B.
 TITLE Edinburgh University/Sanger Centre Nematode EST Project
 JOURNAL Unpublished (2000)
 COMMENT Contact: Blaxter ML
 Institute of Cell, Animal and Population Biology
 University of Edinburgh
 Ashworth Labs, King's Buildings, West Mains Road, Edinburgh, EH9 3JT, UK.
 Tel: +44 131 650 6760
 Fax: +44 131 670 5450
 Email: mark.blaxter@ed.ac.uk
 The library was prepared by Richard Grencis, Manchester University, Manchester. Sequencing was performed by the Pathogen Sequencing Unit, Sanger Centre, Cambridge, UK (Neil Hall, Mike Quail & Bart Barrell).
 PCR Primers
 FORWARD: T3
 BACKWARD: T7PL
 Plate: 40 row: F column: 07
 Seq primer: SKPL
 High quality sequence stop: 160.
 Location/Qualifiers
 1..160
 /organism="Trichuris muris"
 /mol_type="mRNA"
 /db_xref="taxon:70415"
 /clone="Tm ad 40F07"
 /sex="mixed"
 /dev_stage="adult"
 /clone_lib="Trichuris muris (parasitic nematode) mixed adult"
 /note="Vector: Lambda Zap II; Site_1: EcoRI (5'end);

Site 2: XhoI (3'end); Trichuris muris is a nematode parasite of rodents related to the human whipworm Trichuris trichiura. The library was constructed from Trichuris muris adults (Edinburgh 'E' strain) maintained in mice, and was provided by Dr. Richard Grensis, University of Manchester."

ORIGIN

Query Match 100.0%; Score 10; DB 4; Length 160;
 Best Local Similarity 100.0%; Pred. No. 1.1e+04;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
 |||||
 Db 81 CGAACGTTTCG 90

RESULT 58

BM277474/c
 LOCUS 160 bp mRNA linear EST 20-DEC-2001
 DEFINITION Trm ad 40F07_SKPL Trichuris muris (parasitic nematode) mixed adult
 Trichuris muris cdna clone trm_ad_40F07 5', mRNA sequence.

ACCESSION BM277474
 VERSION BM277474.1 GI:17970713
 KEYWORDS EST.

SOURCE

ORGANISM Trichuris muris

Eukaryota; Metazoa; Nematoda; Enoplea; Trichocephalida;

Trichuridae; Trichuris.

REFERENCE 1 (bases 1 to 160)

AUTHORS Blaxter, M.L., Parkinson, J., Whitton, C., Daub, J., Guiliano, D.,

Hall, N., Quayle, M. and Barrell, B.

TITLE Edinburgh University/Sanger Centre Nematode EST Project

JOURNAL Unpublished (2000)

COMMENT Contact: Blaxter ML

Institute of Cell, Animal and Population Biology

University of Edinburgh

Ashworth Labs, King's Buildings, West Mains Road, Edinburgh, EH9

3JF, UK.

Tel: +44 131 650 6760

Fax: +44 131 670 5450

Email: mark.blaxter@ed.ac.uk

The library was prepared by Richard Grensis, Manchester University,
 Manchester. Sequencing was performed by the Pathogen Sequencing
 Unit, Sanger Centre, Cambridge, UK (Neil Hall, Mike Quail & Bart
 Barrell).

PCR Primers

FORWARD: T3

BACKWARD: T7PL

Plate: 40 row: F column: 07

Seq primer: SKPL

High quality sequence stop: 160.

FEATURES

source

1. 160
 /organism="Trichuris muris"
 /mol_type="mRNA"
 /db_xref="taxon:70415"
 /clone="Trm ad 40F07"
 /sex="mixed"
 /dev_stage="adult"
 /clone_lib="Trichuris muris (parasitic nematode) mixed
 adult"
 /note="Vector: Lambda Zap II; Site_1: EcoRI (5'end);
 Site_2: XhoI (3'end); Trichuris muris is a nematode
 parasite of rodents related to the human whipworm
 Trichuris trichiura. The library was constructed from
 Trichuris muris adults (Edinburgh 'E' strain) maintained
 in mice, and was provided by Dr. Richard Grensis,
 University of Manchester."

ORIGIN

Query Match 100.0%; Score 10; DB 4; Length 160;
 Best Local Similarity 100.0%; Pred. No. 1.1e+04;

Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 1 CGAACGTTTCG 10
 |||||
 Db 90 CGAACGTTTCG 81

RESULT 59

BE100895

LOCUS 166 bp mRNA linear EST 13-JUN-2000

DEFINITION UI-R-BJ1-atx-f-12-0-UI.s1 UI-R-BJ1 Rattus norvegicus cDNA clone

UI-R-BJ1-atx-f-12-0-UI 3', mRNA sequence.

ACCESSION BE100895

VERSION BE100895.1 GI:8492796

KEYWORDS EST.

SOURCE Rattus norvegicus (Norway rat)

ORGANISM Rattus norvegicus

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae;
 Rattus.

REFERENCE 1 (bases 1 to 166)

AUTHORS Bonaldo, M.F., Lennon, G. and Soares, M.B.

TITLE Normalization and subtraction: two approaches to facilitate gene

discovery

JOURNAL Genome Res. 6 (9), 791-806 (1996)

MEDLINE 97044477

PUBMED 8889548

COMMENT Contact: Soares, MB

Coordinated Laboratory for Computational Genomics

University of Iowa

375 Newton Road, 4156 MEERF, Iowa City, IA 52242, USA

Tel: 319 335 8250

Fax: 319 335 9565

Email: Bento-soares@uiowa.edu

Oligo-dT track not found, Not 1 site shown in beginning of sequence

is likely internal to the message. cDNA Library Preparation: M.B.

Soares Lab Clone distribution: clones will be available through

Research Genetics (www.resgen.com)

Seq primer: M13 Forward

POLYA=No.

FEATURES

source

1. 166
 /organism="Rattus norvegicus"
 /mol_type="mRNA"
 /strain="Sprague-Dawley"
 /db_xref="taxon:10116"
 /clone="UI-R-BJ1-atx-f-12-0-UI"
 /lab_host="DH10B (Life Technologies)"
 /clone_lib="UI-R-BJ1"
 /note="Vector: pT73D-Pac (Pharmacia) with a modified
 polylinker; Site_1: Not I; Site_2: Eco RI; The UI-R-BJ1
 library is a subtracted library derived from the following
 tissues: atrium at 16.5 dpc, ventricle at 16.5 dpc, AV
 canal at 16.5 dpc, atrium at 15 dpc, ventricle at 15 dpc,
 AV canal at 15 dpc, ventricle at 13 dpc, and adult heart.
 For a detailed description of the library from which this
 clone was derived, please visit our web site at
 ratest.eng.uiowa.edu. The subtraction has been previously
 described in (Bonaldo, Lennon and Soares, Genome Research
 6:791-806, 1996)
 TAG_SEQ=None found"

ORIGIN

Query Match 100.0%; Score 10; DB 2; Length 166;
 Best Local Similarity 100.0%; Pred. No. 1.1e+04;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
 |||||
 Db 97 CGAACGTTTCG 106

RESULT 60

BE100895/c
LOCUS BE100895 166 bp mRNA linear EST 13-JUN-2000
DEFINITION UI-R-BJ1-atx-f-12-0-UI-s1 UI-R-BJ1 Rattus norvegicus cDNA clone
UI-R-BJ1-atx-f-12-0-UI 3', mRNA sequence.
ACCESSION BE100895
VERSION BE100895
KEYWORDS EST.
SOURCE BE100895.1 GI:8492796
ORGANISM Rattus norvegicus (Norway rat)
Rattus norvegicus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae;
Rattus.
REFERENCE 1 (bases 1 to 166)
AUTHORS Bonaldo,M.F., Lennon,G. and Soares,M.B.
TITLE Normalization and subtraction: two approaches to facilitate gene
discovery
JOURNAL Genome Res. 6 (9), 791-806 (1996)
MEDLINE 97044477
PUBMED 889548
COMMENT Contact: Soares, MB
Coordinated Laboratory for Computational Genomics
University of Iowa
375 Newton Road, 4156 MEBRF, Iowa City, IA 52242, USA
Tel: 319 335 8250
Fax: 319 335 9585
Email: bento-soares@uiowa.edu
Oligo-dT track not found, Not 1 site shown in beginning of sequence
is likely internal to the message. cDNA Library Preparation: M.B.
Soares Lab Clone distribution: clones will be available through
Research Genetics (www.resgen.com)
Seq primer: M13 Forward
POBFA=No.

FEATURES
source Location/Qualifiers
1..166
/organism="Rattus norvegicus"
/mol_type="mRNA"
/strain="Sprague-Dawley"
/db_xref="taxon:10116"
/clone="UI-R-BJ1-atx-f-12-0-UI"
/lab_host="DH10B (Life Technologies)"
/clone_lib="UI-R-BJ1"
/note="Vector: p773D-Pac (Pharmacia) with a modified
polylinker; Site 1: Not 1; Site 2: Eco RI; The UI-R-BJ1
library is a subtracted library derived from the following
tissues: atrium at 16.5 dpc, ventricle at 16.5 dpc, AV
canal at 16.5 dpc, atrium at 15 dpc, ventricle at 15 dpc,
AV canal at 15 dpc, ventricle at 13 dpc, and adult heart.
For a detailed description of the library from which this
clone was derived, please visit our web site at
ratest.eng.uiowa.edu. The subtraction has been previously
described in (Bonaldo, Lennon and Soares, Genome Research
6:791-806, 1996)
TAG_SEQ=None found"

ORIGIN
Query Match 100.0%; Score 10; DB 2; Length 166;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 CGAACGTTTCG 10
|||||
Db 106 CGAACGTTTCG 97

RESULT 61
BM174423
LOCUS BM174423 167 bp mRNA linear EST 05-DEC-2001
DEFINITION Tm ad 29C08 SKPL Trichuris muris (parasitic nematode) mixed adult
Trichuris muris cDNA clone Tm_ad_29C08 5', mRNA sequence.
ACCESSION BM174423
VERSION BM174423.1 GI:17353308
KEYWORDS EST.
SOURCE Trichuris muris

ORGANISM
Trichuris muris
Eukaryota; Metazoa; Nematoda; Enoplea; Trichocephalida;
Trichuridae; Trichuris.
REFERENCE 1 (bases 1 to 167)
AUTHORS Blaxter,M.L., Parkinson,J., Whitton,C., Daub,J., Guiliano,D.,
Hall,N., Quayle,M. and Barrell,B.
TITLE Edinburgh University/Sanger Centre Nematode EST Project
JOURNAL Unpublished (2000)
COMMENT Contact: Blaxter ML
Institute of Cell, Animal and Population Biology
Ashworth Labs, King's Buildings, West Mains Road, Edinburgh, EH9
3JT, UK.
Tel: +44 131 650 6760
Fax: +44 131 670 5450
Email: mark.blaxter@ed.ac.uk
The library was prepared by Richard Grensis, Manchester University,
Manchester. Sequencing was performed by the Pathogen Sequencing
Unit, Sanger Centre, Cambridge, UK (Neil Hall, Mike Quail & Bart
Barrell).
PCR Primers
FORWARD: T3
BACKWARD: T7PL
Plate: 29 Row: C column: 08
Seq primer: SKPL
High quality sequence stop: 167.
Location/Qualifiers
1..167
/organism="Trichuris muris"
/mol_type="mRNA"
/db_xref="taxon:70415"
/clone="Tm ad 29C08"
/sex="mixed"
/dev stage="adult"
/clone_lib="Trichuris muris (parasitic nematode) mixed
adult"
/note="Vector: Lambda Zap II; Site 1: EcoRI (5'end);
Site 2: XhoI (3'end); Trichuris muris is a nematode
parasite of rodents related to the human whipworm
Trichuris trichiura. The library was constructed from
Trichuris muris adults (Edinburgh 'E' strain) maintained
in mice, and was provided by Dr. Richard Grensis,
University of Manchester."

ORIGIN
Query Match 100.0%; Score 10; DB 4; Length 167;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 CGAACGTTTCG 10
|||||
Db 83 CGAACGTTTCG 92

RESULT 62
BM174423/c
LOCUS BM174423 167 bp mRNA linear EST 05-DEC-2001
DEFINITION Tm ad 29C08 SKPL Trichuris muris (parasitic nematode) mixed adult
Trichuris muris cDNA clone Tm_ad_29C08 5', mRNA sequence.
ACCESSION BM174423
VERSION BM174423.1 GI:17353308
KEYWORDS EST.
SOURCE Trichuris muris

ORGANISM
Trichuris muris
Eukaryota; Metazoa; Nematoda; Enoplea; Trichocephalida;
Trichuridae; Trichuris.
REFERENCE 1 (bases 1 to 167)
AUTHORS Blaxter,M.L., Parkinson,J., Whitton,C., Daub,J., Guiliano,D.,
Hall,N., Quayle,M. and Barrell,B.
TITLE Edinburgh University/Sanger Centre Nematode EST Project
JOURNAL Unpublished (2000)
COMMENT Contact: Blaxter ML
Institute of Cell, Animal and Population Biology

ORGANISM Trichuris muris
Eukaryota; Metazoa; Nematoda; Enoplea; Trichocephalida;
Trichuridae; Trichuris.
REFERENCE 1 (bases 1 to 167)
AUTHORS Blaxter,M.L., Parkinson,J., Whitton,C., Daub,J., Guiliano,D.,
Hall,N., Quayle,M. and Barrell,B.
TITLE Edinburgh University/Sanger Centre Nematode EST Project
JOURNAL Unpublished (2000)
COMMENT Contact: Blaxter ML
Institute of Cell, Animal and Population Biology
Ashworth Labs, King's Buildings, West Mains Road, Edinburgh, EH9
3JT, UK.
Tel: +44 131 650 6760
Fax: +44 131 670 5450
Email: mark.blaxter@ed.ac.uk
The library was prepared by Richard Grensis, Manchester University,
Manchester. Sequencing was performed by the Pathogen Sequencing
Unit, Sanger Centre, Cambridge, UK (Neil Hall, Mike Quail & Bart
Barrell).
PCR Primers
FORWARD: T3
BACKWARD: T7PL
Plate: 29 Row: C column: 08
Seq primer: SKPL
High quality sequence stop: 167.
Location/Qualifiers
1..167
/organism="Trichuris muris"
/mol_type="mRNA"
/db_xref="taxon:70415"
/clone="Tm ad 29C08"
/sex="mixed"
/dev stage="adult"
/clone_lib="Trichuris muris (parasitic nematode) mixed
adult"
/note="Vector: Lambda Zap II; Site 1: EcoRI (5'end);
Site 2: XhoI (3'end); Trichuris muris is a nematode
parasite of rodents related to the human whipworm
Trichuris trichiura. The library was constructed from
Trichuris muris adults (Edinburgh 'E' strain) maintained
in mice, and was provided by Dr. Richard Grensis,
University of Manchester."

ORIGIN
Query Match 100.0%; Score 10; DB 4; Length 167;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 CGAACGTTTCG 10
|||||
Db 83 CGAACGTTTCG 92

RESULT 62
BM174423/c
LOCUS BM174423 167 bp mRNA linear EST 05-DEC-2001
DEFINITION Tm ad 29C08 SKPL Trichuris muris (parasitic nematode) mixed adult
Trichuris muris cDNA clone Tm_ad_29C08 5', mRNA sequence.
ACCESSION BM174423
VERSION BM174423.1 GI:17353308
KEYWORDS EST.
SOURCE Trichuris muris

ORGANISM
Trichuris muris
Eukaryota; Metazoa; Nematoda; Enoplea; Trichocephalida;
Trichuridae; Trichuris.
REFERENCE 1 (bases 1 to 167)
AUTHORS Blaxter,M.L., Parkinson,J., Whitton,C., Daub,J., Guiliano,D.,
Hall,N., Quayle,M. and Barrell,B.
TITLE Edinburgh University/Sanger Centre Nematode EST Project
JOURNAL Unpublished (2000)
COMMENT Contact: Blaxter ML
Institute of Cell, Animal and Population Biology

University of Edinburgh
 Ashworth Labs, King's Buildings, West Mains Road, Edinburgh, EH9
 3JT, UK.
 Tel: +44 131 650 6760
 Fax: +44 131 670 5450
 Email: mark.blaxter@ed.ac.uk
 The library was prepared by Richard Grenclis, Manchester University,
 Manchester. Sequencing was performed by the Pathogen Sequencing
 Unit, Sanger Centre, Cambridge, UK (Neil Hall, Mike Quail & Bart
 Barrell).

PCR Primers
 FORWARD: T3
 BACKWARD: T7PL
 Plate: 29 row: C column: 08
 Seq primer: SKPL
 High quality sequence stop: 167.

FEATURES

source
 1. .167
 /organism="Trichuris muris"
 /mol_type="mRNA"
 /db_xref="taxon:70415"
 /clone="Tm_ad_29C08"
 /sex="mixed"
 /dev_stage="adult"
 /clone_lib="Trichuris muris (parasitic nematode) mixed
 adult"
 /note="Vector: Lambda Zap II; Site1: EcoRI (5'end);
 Site2: XhoI (3'end); Trichuris muris is a nematode
 parasite of rodents related to the human whipworm
 Trichuris trichiura. The library was constructed from
 Trichuris muris adults (Edinburgh 'E' strain) maintained
 in mice, and was provided by Dr. Richard Grenclis,
 University of Manchester."

ORIGIN

Query Match 100.0%; Score 10; DB 4; Length 167;
 Best Local Similarity 100.0%; Pred. No. 1.1e+04;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
 |||||
 Db 92 CGAACGTTTCG 83

RESULT 63
 BH226178
 LOCUS
 DEFINITION 1006130E11.y1 1006 - RescueMu Grid G Zea mays genomic, genomic
 survey sequence.

ACCESSION
 VERSION BH226178.1 GI:16824887
 KEYWORDS
 SOURCE GSS.

ORGANISM

Zea mays
 Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
 Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; PACCAD
 clade; Panicoideae; Andropogoneae; Zea.

REFERENCE
 1 (bases 1 to 167)
 Walbot, V.
 Maize genomic sequences found using engineered RescueMu transposon
 Unpublished (2001)
 TITLE
 JOURNAL
 COMMENT
 Department of Biological Sciences
 Stanford University
 855 California Ave, Palo Alto, CA 94304, USA
 Tel: 650 723 2227
 Fax: 650 725 8221
 Email: walbot@stanford.edu

Possible ligation site so sequence was trimmed. Post-ligation
 sequence submitted separately.
 Plate: 1006130 row: 11
 Class: transposon-tagged.
 Location/Qualifiers

FEATURES

source

1. .167
 /organism="Zea mays"
 /mol_type="genomic DNA"
 /cultivar="mixed background W23/A188/B73"
 /db_xref="taxon:4577"
 /tissue_type="leaf"
 /dev_stage="adult"
 /lab_host="DH10B"
 /clone_lib="1006 - RescueMu Grid G"
 /note="Organ: leaf; Vector: RescueMu (engineered from
 pBlueScript backbone); Site 1: BamHI; Site 2: BglII;
 RescueMu is a 4.9 kb, modified maize Mu transposon
 designed to allow plasmid rescue from total genomic DNA.
 Mu elements insert preferentially into transcription
 units. For more information on RescueMu, go to the web
 site 'www.zmdb.lastate.edu' and follow the links for
 'RescueMu.' Grid G was grown at Stanford in 2000. DNA was
 extracted from leaf punches, double digested using BamHI
 and BglII, and ligated to form circular plasmids. DH10B
 cells were transformed and then screened on LB plates with
 ampicillin."

ORIGIN

Query Match 100.0%; Score 10; DB 8; Length 167;
 Best Local Similarity 100.0%; Pred. No. 1.1e+04;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
 |||||
 Db 33 CGAACGTTTCG 42

RESULT 64

BH226178/c
 LOCUS
 DEFINITION 1006130E11.y1 1006 - RescueMu Grid G Zea mays genomic, genomic
 survey sequence.

ACCESSION
 VERSION BH226178.1 GI:16824887
 KEYWORDS
 SOURCE GSS.

ORGANISM

Zea mays
 Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
 Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; PACCAD
 clade; Panicoideae; Andropogoneae; Zea.

REFERENCE
 1 (bases 1 to 167)
 Walbot, V.
 Maize genomic sequences found using engineered RescueMu transposon
 Unpublished (2001)
 TITLE
 JOURNAL
 COMMENT
 Department of Biological Sciences
 Stanford University
 855 California Ave, Palo Alto, CA 94304, USA
 Tel: 650 723 2227
 Fax: 650 725 8221
 Email: walbot@stanford.edu

Possible ligation site so sequence was trimmed. Post-ligation
 sequence submitted separately.
 Plate: 1006130 row: 11
 Class: transposon-tagged.
 Location/Qualifiers

FEATURES

source
 1. .167
 /organism="Zea mays"
 /mol_type="genomic DNA"
 /cultivar="mixed background W23/A188/B73"
 /db_xref="taxon:4577"
 /tissue_type="leaf"
 /dev_stage="adult"
 /lab_host="DH10B"
 /clone_lib="1006 - RescueMu Grid G"
 /note="Organ: leaf; Vector: RescueMu (engineered from
 pBlueScript backbone); Site 1: BamHI; Site 2: BglII;
 RescueMu is a 4.9 kb, modified maize Mu transposon

designed to allow plasmid rescue from total genomic DNA. Mu elements insert preferentially into transcription units. For more information on RescueMu, go to the web site 'www.zmdb.iastate.edu' and follow the links for 'RescueMu.' Grid G was grown at Stanford in 2000. DNA was extracted from leaf punches, double digested using BamHI and BglII, and ligated to form circular plasmids. DH10B cells were transformed and then screened on LB plates with ampicillin."

ORIGIN

Query Match 100.0%; Score 10; DB 8; Length 167;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
| | | | | | | | | |
Db 42 CGAACGTTTCG 33

RESULT 65

BH226234
LOCUS 167 bp DNA linear GSS 08-NOV-2001
DEFINITION 1006130H08.y1 1006 - RescueMu Grid G Zea mays genomic, genomic survey sequence.
ACCESSION BH226234
VERSION BH226234.1 GI:16825007
KEYWORDS GSS.
SOURCE Zea mays
ORGANISM Zea mays

REFERENCE

Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; PACCAD clade; Panicoideae; Andropogoneae; Zea.

1 (bases 1 to 167)
Walbot, V.
Maize genomic sequences found using engineered RescueMu transposon

AUTHORS

Walbot V
Contact: Walbot V
Department of Biological Sciences
Stanford University
855 California Ave, Palo Alto, CA 94304, USA

Tel: 650 723 2227
Fax: 650 725 8221

Email: walbot@stanford.edu

Very probable ligation site found so sequence was trimmed.

Post-ligation sequence submitted separately.

Plate: 1006130 row: 11

Class: transposon-tagged.

Location/Qualifiers

FEATURES

source

1. .167
/organism="Zea mays"
/mol_type="genomic DNA"
/cultivar="mixed background W23/A188/B73"
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/tissue_type="leaf"
/dev_stage="adult"
/lab_host="DH10B"
/clone_lib="1006 - RescueMu Grid G"
/notes="Organ: leaf; Vector: RescueMu (engineered from pBluescript backbone); Site 1: BamHI; Site 2: BglII; RescueMu is a 4.9 kb, modified maize Mu transposon designed to allow plasmid rescue from total genomic DNA. Mu elements insert preferentially into transcription units. For more information on RescueMu, go to the web site 'www.zmdb.iastate.edu' and follow the links for 'RescueMu.' Grid G was grown at Stanford in 2000. DNA was extracted from leaf punches, double digested using BamHI and BglII, and ligated to form circular plasmids. DH10B cells were transformed and then screened on LB plates with ampicillin."

ORIGIN

Query Match 100.0%; Score 10; DB 8; Length 167;

Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
| | | | | | | | | |
Db 33 CGAACGTTTCG 42

RESULT 66
BH226234/c
LOCUS 167 bp DNA linear GSS 08-NOV-2001
DEFINITION 1006130H08.y1 1006 - RescueMu Grid G Zea mays genomic, genomic survey sequence.
ACCESSION BH226234
VERSION BH226234.1 GI:16825007
KEYWORDS GSS.
SOURCE Zea mays
ORGANISM Zea mays

Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; PACCAD clade; Panicoideae; Andropogoneae; Zea.

1 (bases 1 to 167)
Walbot, V.
Maize genomic sequences found using engineered RescueMu transposon

REFERENCE

Walbot, V.
Maize genomic sequences found using engineered RescueMu transposon

AUTHORS

Walbot V
Contact: Walbot V
Department of Biological Sciences
Stanford University
855 California Ave, Palo Alto, CA 94304, USA

Tel: 650 723 2227
Fax: 650 725 8221

Email: walbot@stanford.edu

Very probable ligation site found so sequence was trimmed.

Post-ligation sequence submitted separately.

Plate: 1006130 row: 11

Class: transposon-tagged.

Location/Qualifiers

FEATURES

source

1. .167
/organism="Zea mays"
/mol_type="genomic DNA"
/cultivar="mixed background W23/A188/B73"
/db_xref="taxon:4577"
/tissue_type="leaf"
/dev_stage="adult"
/lab_host="DH10B"
/clone_lib="1006 - RescueMu Grid G"
/notes="Organ: leaf; Vector: RescueMu (engineered from pBluescript backbone); Site 1: BamHI; Site 2: BglII; RescueMu is a 4.9 kb, modified maize Mu transposon designed to allow plasmid rescue from total genomic DNA. Mu elements insert preferentially into transcription units. For more information on RescueMu, go to the web site 'www.zmdb.iastate.edu' and follow the links for 'RescueMu.' Grid G was grown at Stanford in 2000. DNA was extracted from leaf punches, double digested using BamHI and BglII, and ligated to form circular plasmids. DH10B cells were transformed and then screened on LB plates with ampicillin."

ORIGIN

Query Match 100.0%; Score 10; DB 8; Length 167;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
| | | | | | | | | |
Db 42 CGAACGTTTCG 33

RESULT 67

BH226364
LOCUS 167 bp DNA linear GSS 08-NOV-2001
DEFINITION 1006131G03.y1 1006 - RescueMu Grid G Zea mays genomic, genomic

```

survey sequence.
ACCESSION      BH226364
VERSION        BH226364.1 GI:16825270
KEYWORDS       GSS.
SOURCE         Zea mays
ORGANISM       Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
               Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; PACCAD
               clade; Panicoideae; Andropogoneae; Zea.
REFERENCE      1 (bases 1 to 167)
AUTHORS        Walbot, V.
TITLE          Maize genomic sequences found using engineered RescueMu transposon
JOURNAL        Unpublished (2001)
COMMENT        Contact: Walbot V
               Department of Biological Sciences
               Stanford University
               855 California Ave, Palo Alto, CA 94304, USA
               Tel: 650 723 2227
               Fax: 650 725 8221
               Email: walbot@stanford.edu
               Very probable ligation site found so sequence was trimmed.
               Post-ligation sequence submitted separately.
               Plate: 1006131 row: 11
               Class: transposon-tagged.
               Location/Qualifiers
                 1..167
                 /organism="Zea mays"
                 /mol_type="genomic DNA"
                 /cultivar="mixed background W23/A188/B73"
                 /db_xref="taxon:4577"
                 /tissue_type="leaf"
                 /dev_stage="adult"
                 /lab_host="DH10B"
                 /clone_lib="1006 - RescueMu Grid G"
                 /notes="Organ: leaf; Vector: RescueMu (engineered from
                 pBluescript backbone); Site 1: BamHI; Site 2: BglII;
                 RescueMu is a 4.9 kb, modified maize Mu transposon
                 designed to allow plasmid rescue from total genomic DNA.
                 Mu elements insert preferentially into transcription
                 units. For more information on RescueMu, go to the web
                 site 'www.zmdb.iastate.edu' and follow the links for
                 'RescueMu.' Grid G was grown at Stanford in 2000. DNA was
                 extracted from leaf punches, double digested using BamHI
                 and BglII, and ligated to form circular plasmids. DH10B
                 cells were transformed and then screened on LB plates with
                 ampicillin."

FEATURES             source
source
1..167
/organism="Zea mays"
/mol_type="genomic DNA"
/cultivar="mixed background W23/A188/B73"
/db_xref="taxon:4577"
/tissue_type="leaf"
/dev_stage="adult"
/lab_host="DH10B"
/clone_lib="1006 - RescueMu Grid G"
/notes="Organ: leaf; Vector: RescueMu (engineered from
pBluescript backbone); Site 1: BamHI; Site 2: BglII;
RescueMu is a 4.9 kb, modified maize Mu transposon
designed to allow plasmid rescue from total genomic DNA.
Mu elements insert preferentially into transcription
units. For more information on RescueMu, go to the web
site 'www.zmdb.iastate.edu' and follow the links for
'RescueMu.' Grid G was grown at Stanford in 2000. DNA was
extracted from leaf punches, double digested using BamHI
and BglII, and ligated to form circular plasmids. DH10B
cells were transformed and then screened on LB plates with
ampicillin."

ORIGIN
Query Match      100.0%; Score 10; DB 8; Length 167;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1 CGAACGTTTCG 10
        |||||
Db      51 CGAACGTTTCG 42

RESULT 69
CF495616
LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
Schistosoma mansoni
Schistosoma mansoni
Eukaryota; Metazoa; Platyhelminthes; Trematoda; Digenea;
Strigeidida; Schistosomatoidea; Schistosomatidae; Schistosoma.
REFERENCE      1 (bases 1 to 168)
AUTHORS        DeMarco, R., Kowalcowski, A.T., Machado, A.A., Soares, M.B.,
               Margioni, C., Kawano, T., Rodrigues, V., Madeira, A.M.B.N.,
               Wilson, R.A., Menck, C.F.M., Setubal, M.C., Dias-Neto, E., Leite, L.C.C.
               and Verjovski-Almeida, S.
               Saci-1, -2 and -3 and Perere, four novel retrotransposons with high
               transcriptional activities from the human parasite Schistosoma
               mansoni
JOURNAL        J. Virol. 78 (6), 2967-2978 (2004)
COMMENT        Contact: Dr. Sergio Verjovski-Almeida
               Departamento de Bioquímica
               Instituto de Química - Universidade de São Paulo
               Av. Prof. Lineu Prestes 748 sala 1200, 05508-900 São Paulo - SP,
               Brasil
               Tel: +55-11-3091-2173
               Fax: +55-11-3091-2186

survey sequence.
BH226364      167 bp DNA linear GSS 08-NOV-2001
DEFINITION    1006131G03.v1 1006 - RescueMu Grid G Zea mays genomic, genomic
survey sequence.
ACCESSION      BH226364
VERSION        BH226364.1 GI:16825270
KEYWORDS       GSS.
SOURCE         Zea mays
ORGANISM       Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
               Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; PACCAD
               clade; Panicoideae; Andropogoneae; Zea.
REFERENCE      1 (bases 1 to 167)
AUTHORS        Walbot, V.
TITLE          Maize genomic sequences found using engineered RescueMu transposon
JOURNAL        Unpublished (2001)
COMMENT        Contact: Walbot V
               Department of Biological Sciences
               Stanford University
               855 California Ave, Palo Alto, CA 94304, USA
               Tel: 650 723 2227
               Fax: 650 725 8221
               Email: walbot@stanford.edu
               Very probable ligation site found so sequence was trimmed.
               Post-ligation sequence submitted separately.
               Plate: 1006131 row: 11
               Class: transposon-tagged.
               Location/Qualifiers
                 1..167
                 /organism="Zea mays"
                 /mol_type="genomic DNA"
                 /cultivar="mixed background W23/A188/B73"
                 /db_xref="taxon:4577"
                 /tissue_type="leaf"
                 /dev_stage="adult"
                 /lab_host="DH10B"
                 /clone_lib="1006 - RescueMu Grid G"
                 /notes="Organ: leaf; Vector: RescueMu (engineered from
                 pBluescript backbone); Site 1: BamHI; Site 2: BglII;
                 RescueMu is a 4.9 kb, modified maize Mu transposon
                 designed to allow plasmid rescue from total genomic DNA.
                 Mu elements insert preferentially into transcription
                 units. For more information on RescueMu, go to the web
                 site 'www.zmdb.iastate.edu' and follow the links for
                 'RescueMu.' Grid G was grown at Stanford in 2000. DNA was
                 extracted from leaf punches, double digested using BamHI
                 and BglII, and ligated to form circular plasmids. DH10B
                 cells were transformed and then screened on LB plates with
                 ampicillin."

ORIGIN
Query Match      100.0%; Score 10; DB 8; Length 167;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1 CGAACGTTTCG 10
        |||||
Db      42 CGAACGTTTCG 51

RESULT 68
BH226364/c
LOCUS
DEFINITION
ACCESSION      BH226364
VERSION        BH226364.1 GI:16825270
KEYWORDS       GSS.
SOURCE         Zea mays
ORGANISM       Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
               Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; PACCAD
               clade; Panicoideae; Andropogoneae; Zea.
REFERENCE      1 (bases 1 to 167)
AUTHORS        Walbot, V.
TITLE          Maize genomic sequences found using engineered RescueMu transposon
JOURNAL        Unpublished (2001)
COMMENT        Contact: Walbot V
               Department of Biological Sciences
               Stanford University
               855 California Ave, Palo Alto, CA 94304, USA
               Tel: 650 723 2227
               Fax: 650 725 8221
               Email: walbot@stanford.edu
               Very probable ligation site found so sequence was trimmed.
               Post-ligation sequence submitted separately.
               Plate: 1006131 row: 11
               Class: transposon-tagged.
               Location/Qualifiers
                 1..167
                 /organism="Zea mays"
                 /mol_type="genomic DNA"
                 /cultivar="mixed background W23/A188/B73"
                 /db_xref="taxon:4577"
                 /tissue_type="leaf"
                 /dev_stage="adult"
                 /lab_host="DH10B"
                 /clone_lib="1006 - RescueMu Grid G"
                 /notes="Organ: leaf; Vector: RescueMu (engineered from
                 pBluescript backbone); Site 1: BamHI; Site 2: BglII;
                 RescueMu is a 4.9 kb, modified maize Mu transposon
                 designed to allow plasmid rescue from total genomic DNA.
                 Mu elements insert preferentially into transcription
                 units. For more information on RescueMu, go to the web
                 site 'www.zmdb.iastate.edu' and follow the links for
                 'RescueMu.' Grid G was grown at Stanford in 2000. DNA was
                 extracted from leaf punches, double digested using BamHI
                 and BglII, and ligated to form circular plasmids. DH10B
                 cells were transformed and then screened on LB plates with
                 ampicillin."

ORIGIN
Query Match      100.0%; Score 10; DB 8; Length 167;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1 CGAACGTTTCG 10
        |||||
Db      51 CGAACGTTTCG 42

RESULT 69
CF495616
LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
Schistosoma mansoni
Schistosoma mansoni
Eukaryota; Metazoa; Platyhelminthes; Trematoda; Digenea;
Strigeidida; Schistosomatoidea; Schistosomatidae; Schistosoma.
REFERENCE      1 (bases 1 to 168)
AUTHORS        DeMarco, R., Kowalcowski, A.T., Machado, A.A., Soares, M.B.,
               Margioni, C., Kawano, T., Rodrigues, V., Madeira, A.M.B.N.,
               Wilson, R.A., Menck, C.F.M., Setubal, M.C., Dias-Neto, E., Leite, L.C.C.
               and Verjovski-Almeida, S.
               Saci-1, -2 and -3 and Perere, four novel retrotransposons with high
               transcriptional activities from the human parasite Schistosoma
               mansoni
JOURNAL        J. Virol. 78 (6), 2967-2978 (2004)
COMMENT        Contact: Dr. Sergio Verjovski-Almeida
               Departamento de Bioquímica
               Instituto de Química - Universidade de São Paulo
               Av. Prof. Lineu Prestes 748 sala 1200, 05508-900 São Paulo - SP,
               Brasil
               Tel: +55-11-3091-2173
               Fax: +55-11-3091-2186

```

JOURNAL COMMENT

FEATURES source

ORIGIN

RESULT 69

CF495616

LOCUS

DEFINITION

ACCESSION

VERSION

KEYWORDS

SOURCE

ORGANISM

REFERENCE

AUTHORS

TITLE

JOURNAL

COMMENT

Email: verjoe@iq.usp.br

This sequence was derived from the FAPESP Schistosoma mansoni EST Genome Project. All sequences in the project were assembled and annotated. This entry and all the assembled sequences can be seen in the following URL <http://bioinfo.iq.usp.br/schisto/>
Plate: MLI-0017T-R142 row: 2 column: D.

FEATURES

source

1. .168
Location/Qualifiers
/organism="Schistosoma mansoni"
/mol_type="mRNA"
/db_xref="taxon:6183"
/clone="MLI-0017T-R142-D02.G"
/sex="mixed pool"
/dev_stage="miracidium"
/clone_lib="MLI-0017"
/note="Vector: pGEM T-easy"

ORIGIN

Query Match 100.0%; Score 10; DB 7; Length 168;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10

Db 77 CGAACGTTTCG 86

RESULT 70

CF495616/c

LOCUS

DEFINITION MLI-0017T-R142-D02-U.G MLI-0017 Schistosoma mansoni cDNA clone
MLI-0017T-R142-D02.G similar to SR2 retrotransposon, mRNA sequence.

ACCESSION CF495616

VERSION CF495616.1 GI:46888641

KEYWORDS EST

SOURCE Schistosoma mansoni

ORGANISM Schistosoma mansoni

Eukaryota; Metazoa; Platyhelminthes; Trematoda; Digenea;

Strigoida; Schistosomatoidea; Schistosomatidae; Schistosoma.

REFERENCE 1 (bases 1 to 168)

AUTHORS DeMarco, R., Kowaltowski, A.T., Machado, A.A., Soares, M.B.,

Gargioni, C., Kawano, T., Rodrigues, V., Madeira, A.M.N.,

Wilson, R.A., Menck, C.F.M., Setubal, M.C., Dias-Neto, E., Leite, L.C.C.

and Verjovski-Almeida, S.

Saci-1, -2 and -3 and Perere, four novel retrotransposons with high

transcriptional activities from the human parasite Schistosoma

mansoni

J. Virol. 78 (6), 2967-2978 (2004)

Contact: Dr. Sergio Verjovski-Almeida

Departamento de Bioquímica

Instituto de Química - Universidade de São Paulo

Av. Prof. Lineu Prestes 748 sala 1200, 05508-900 São Paulo - SP,

Brasil

Tel: +55-11-3091-2173

Fax: +55-11-3091-2186

Email: verjoe@iq.usp.br

This sequence was derived from the FAPESP Schistosoma mansoni EST

Genome Project. All sequences in the project were assembled and

annotated. This entry and all the assembled sequences can be seen

in the following URL <http://bioinfo.iq.usp.br/schisto/>

Plate: MLI-0017T-R142 row: 2 column: D.

FEATURES

source

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/note="Vector: pGEM T-easy"

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Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10

Db 152 CGAACGTTTCG 161

FEATURES

source

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/sex="mixed pool"
/dev_stage="miracidium"
/clone_lib="Kuabara Mixed stage C. briggsae"
/note="Vector: pGEM T-easy"

ORIGIN

source

1. .168

Location/Qualifiers

/organism="Caenorhabditis briggsae"

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/clone="Kuabara Mixed stage C. briggsae"

/sex="mixed pool"

/dev_stage="miracidium"

/clone_lib="Kuabara Mixed stage C. briggsae"

/note="Vector: pGEM T-easy"

1. .168

Location/Qualifiers

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Location/Qualifiers

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/note="Vector: pGEM T-easy"

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Location/Qualifiers

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/db_xref="taxon:6238"

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/dev_stage="miracidium"

/clone_lib="Kuabara Mixed stage C. briggsae"

/note="Vector: pGEM T-easy"

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Location/Qualifiers

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/mol_type="mRNA"

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/clone="Kuabara Mixed stage C. briggsae"

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/dev_stage="miracidium"

/clone_lib="Kuabara Mixed stage C. briggsae"

/note="Vector: pGEM T-easy"

1. .168

Location/Qualifiers

/organism="Caenorhabditis briggsae"

Query Match 100.0%; Score 10; DB 7; Length 168;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10

Db 86 CGAACGTTTCG 77

RESULT 71

R04873

LOCUS

DEFINITION PK33h10.r1 Kuabara Mixed stage C. briggsae Caenorhabditis briggsae

cDNA, mRNA sequence.

ACCESSION R04873

VERSION R04873.1 GI:754609

KEYWORDS EST

SOURCE Caenorhabditis briggsae

ORGANISM Caenorhabditis briggsae

Eukaryota; Metazoa; Nematoda; Chromadorea; Rhabditida;

Rhabditioidea; Rhabditidae; Peloderinae; Caenorhabditis.

REFERENCE 1 (bases 1 to 168)

AUTHORS Hillier, L., Chiapelli, B., Chisoe, S., Clark, N., Couch, J.,

Duboue, F., Hawkins, M., Holman, M., Hultman, M., Kucaba, T.,

Kuabara, P., Le, M., Mardis, E., Marra, M., Parsons, J., Rifkin, L.,

Rohlfing, T., Tan, F., Trevaskis, E., Waterston, R., Wohldmann, P. and

Wilson, R.

Washington University

Unpublished (1995)

TITLE

JOURNAL

COMMENT

Contact: Marra MA

Washington University Genome Sequencing Center

Washington University School of Medicine

4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108

Tel: 314 286 1455

Fax: 314 286 1810

Email: mmarr@wustl.edu

PCR F: TGTAAACGACGCGCAGTTCAGCAGTTCAGCCTGG

PCR B: CAGGAACAGTATGACCTATGATGATTTTCACGGGTA

Source: Washington University Genome Sequencing Center

PCR amplified DNA is available from Washington University Genome

Sequencing Center. Aliquots of the library may be requested from P.

Kuabara (pk@mcrc-lmb.cam.ac.uk).

Seq primer: Commercially available M13 reverse dye primer.

Location/Qualifiers

1. .168

/organism="Caenorhabditis briggsae"

/mol_type="mRNA"

/strain="G16 Gujarat"

/db_xref="taxon:6238"

/clone_lib="Kuabara Mixed stage C. briggsae"

/notes="Vector: Lambda gt10; Site 1: EcoRI; Site 2: EcoRI;

Stage-mixed, Sex: hermaphrodite. Library construction:

First strand oligo(dT) primed. Second strand was as per

Gubler/Hoffman. Ligated to EcoRI adaptors. Library is

non-directional. Library is non-normalized. Library is

constructed by P.E. Kuabara. Additional details on

construction of the library are described in P.E.

Kuabara and S. Shah, NAR 22: 4414 - 4418 (1994). Adaptor

sequence: GAATTC CGTGTCTGTCG"

FEATURES

source

1. .168
Location/Qualifiers
/organism="Caenorhabditis briggsae"
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/strain="G16 Gujarat"
/db_xref="taxon:6238"
/clone_lib="Kuabara Mixed stage C. briggsae"
/notes="Vector: Lambda gt10; Site 1: EcoRI; Site 2: EcoRI;
Stage-mixed, Sex: hermaphrodite. Library construction:
First strand oligo(dT) primed. Second strand was as per
Gubler/Hoffman. Ligated to EcoRI adaptors. Library is
non-directional. Library is non-normalized. Library is
constructed by P.E. Kuabara. Additional details on
construction of the library are described in P.E.
Kuabara and S. Shah, NAR 22: 4414 - 4418 (1994). Adaptor
sequence: GAATTC CGTGTCTGTCG"

ORIGIN

source

1. .168

Location/Qualifiers

/organism="Caenorhabditis briggsae"

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/notes="Vector: Lambda gt10; Site 1: EcoRI; Site 2: EcoRI;
Stage-mixed, Sex: hermaphrodite. Library construction:
First strand oligo(dT) primed. Second strand was as per
Gubler/Hoffman. Ligated to EcoRI adaptors. Library is
non-directional. Library is non-normalized. Library is
constructed by P.E. Kuabara. Additional details on
construction of the library are described in P.E.
Kuabara and S. Shah, NAR 22: 4414 - 4418 (1994). Adaptor
sequence: GAATTC CGTGTCTGTCG"

1. .168

Location/Qualifiers

/organism="Caenorhabditis briggsae"

/mol_type="mRNA"

/strain="G16 Gujarat"

/db_xref="taxon:6238"

/clone_lib="Kuabara Mixed stage C. briggsae"

/notes="Vector: Lambda gt10; Site 1: EcoRI; Site 2: EcoRI;
Stage-mixed, Sex: hermaphrodite. Library construction:
First strand oligo(dT) primed. Second strand was as per
Gubler/Hoffman. Ligated to EcoRI adaptors. Library is
non-directional. Library is non-normalized. Library is
constructed by P.E. Kuabara. Additional details on
construction of the library are described in P.E.
Kuabara and S. Shah, NAR 22: 4414 - 4418 (1994). Adaptor
sequence: GAATTC CGTGTCTGTCG"

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DEFINITION pk33h10.r1 Kuwabara Mixed stage C. briggsae Caenorhabditis briggsae
cDNA, mRNA sequence.
ACCESSION R04873
VERSION R04873.1 GI:754609
KEYWORDS EST.
SOURCE Caenorhabditis briggsae
ORGANISM Caenorhabditis briggsae
REFERENCE 1 (bases 1 to 168)
AUTHORS Hallier, L., Chiapelli, B., Chisoso, S., Ciark, N., Couch, J.,
Dubuque, T., Hawkins, M., Holman, M., Hultman, M., Kucaba, T.,
Kuwabara, P., Le, M., Mardis, E., Marra, M., Parsons, J., Rifkin, L.,
Rohlfing, T., Tan, F., Trevisakis, E., Waterston, R., Wohlmann, P. and
Wilson, R.
Washington University Caenorhabditis briggsae EST project
Unpublished (1995)
CONTACT: Marra NA
Washington University Genome Sequencing Center
Washington University School of Medicine
4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108
Tel: 314 286 1455
Fax: 314 286 1810
Email: mmarr@watson.wustl.edu
PCR F: TGTAACACGCGCAGTCAGCAAGTTCAGCCTGG
PCR B: CAGGAACAGCTATGACCTTATGATTTCTCCAGGTA
Source: Washington University Genome Sequencing Center
PCR amplified DNA is available from Washington University Genome
Sequencing Center. Aliquots of the library may be requested from P.
Kuwabara (pek@mc-lmb.cam.ac.uk).
Seq primer: Commercially available M13 reverse dye primer.
FEATURES
source
1..168
Location/Qualifiers
/organism="Caenorhabditis briggsae"
/mol_type="mRNA"
/strain="G16 Gujarat"
/db_xref="taxon:6238"
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Stage: mixed, Sex: hermaphrodite. Library construction:
First strand oligo(dT) primed. Second strand was as per
Gubler/Hoffman. Ligated to EcoRI adaptors. Library is
non-directional. Library is non-normalized. Library
constructed by P.E. Kuwabara. Additional details on
construction of the library are described in P.E.
Kuwabara and S. Shah, NAR 22: 4414 - 4418 (1994). Adaptor
sequence: GAATTC CGTGTCTGTCG"

ORIGIN
Query Match 100.0%; Score 10; DB 7; Length 168;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTC 10
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Db 161 CGACGTTTC 152

RESULT 73
BH226103
LOCUS 1006130A12.y1 1006 - RescueMu Grid G Zea mays genomic, genomic
survey sequence.
DEFINITION 1006130A12.y1 1006 - RescueMu Grid G Zea mays genomic, genomic
survey sequence.
ACCESSION BH226103
VERSION BH226103.1 GI:16824735
KEYWORDS GSS.
SOURCE Zea mays
ORGANISM Zea mays
REFERENCE 1 (bases 1 to 168)
AUTHORS Walbot, V.
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; PACCAD
clade; Panicoideae; Andropogoneae; Zea.
REFERENCE 1 (bases 1 to 168)
AUTHORS Walbot, V.

```

```

TITLE
JOURNAL
COMMENT
Maize genomic sequences found using engineered RescueMu transposon
Unpublished (2001)
CONTACT: Walbot V
Department of Biological Sciences
Stanford University
855 California Ave, Palo Alto, CA 94304, USA
Tel: 650 723 2227
Fax: 650 725 8221
Email: walbot@stanford.edu
Possible ligation site so sequence was trimmed. Post-ligation
sequence submitted separately.
Plate: 1006130 row: 11
Class: transposon-tagged.
FEATURES
source
1..168
Location/Qualifiers
/organism="Zea mays"
/mol_type="genomic DNA"
/cultivar="mixed background W23/A188/B73"
/db_xref="taxon:4577"
/tissue_type="leaf"
/dev_stage="adult"
/clone_lib="1006 - RescueMu Grid G"
/notes="Organ: leaf; Vector: RescueMu (engineered from
pBluescript backbone); Site 1: BamHI; Site 2: BglII;
RescueMu is a 4.9 kb, modified maize Mu transposon
designed to allow plasmid rescue from total genomic DNA.
Mu elements insert preferentially into transcription
units. For more information on RescueMu, go to the web
site 'www.zmdb.iastate.edu' and follow the links for
'RescueMu.' Grid G was grown at Stanford in 2000. DNA was
extracted from leaf punches, double digested using BamHI
and BglII, and ligated to form circular plasmids. DH10B
cells were transformed and then screened on LB plates with
ampicillin."

ORIGIN
Query Match 100.0%; Score 10; DB 8; Length 168;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTC 10
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Db 34 CGACGTTTC 43

RESULT 74
BH226103/c
LOCUS 1006130A12.y1 1006 - RescueMu Grid G Zea mays genomic, genomic
survey sequence.
DEFINITION 1006130A12.y1 1006 - RescueMu Grid G Zea mays genomic, genomic
survey sequence.
ACCESSION BH226103
VERSION BH226103.1 GI:16824735
KEYWORDS GSS.
SOURCE Zea mays
ORGANISM Zea mays
REFERENCE 1 (bases 1 to 168)
AUTHORS Walbot, V.
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; PACCAD
clade; Panicoideae; Andropogoneae; Zea.
REFERENCE 1 (bases 1 to 168)
AUTHORS Walbot, V.
Maize genomic sequences found using engineered RescueMu transposon
Unpublished (2001)
CONTACT: Walbot V
Department of Biological Sciences
Stanford University
855 California Ave, Palo Alto, CA 94304, USA
Tel: 650 723 2227
Fax: 650 725 8221
Email: walbot@stanford.edu
Possible ligation site so sequence was trimmed. Post-ligation
sequence submitted separately.
Plate: 1006130 row: 11

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Class: transposon-tagged.
FEATURES
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        /dev_stage="adult"
        /lab_host="DH10B"
        /clone_lib="1006 - RescueMu Grid G"
        /note="Organ: leaf; Vector: RescueMu (engineered from pBlueScript backbone); Site: 1: BamHI; Site: 2: BglII; RescueMu is a 4.9 kb, modified maize Mu transposon designed to allow plasmid rescue from total genomic DNA. Mu elements insert preferentially into transcription units. For more information on RescueMu, go to the web site 'www.zmdb.iastate.edu' and follow the links for 'RescueMu.' Grid G was grown at Stanford in 2000. DNA was extracted from leaf punches, double digested using BamHI and BglII, and ligated to form circular plasmids. DH10B cells were transformed and then screened on LB plates with ampicillin."
ORIGIN
  Query Match      100.0%; Score 10; DB 8; Length 168;
  Best Local Similarity 100.0%; Pred. No. 1.1e+04;
  Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 43 CGAACGTTTCG 34

RESULT 75
FR0044729
LOCUS      169 bp      DNA      linear      GSS 25-FEB-2004
DEFINITION Fugu rubripes GSS sequence, clone 192G14fD11, genomic survey
sequence.
ACCESSION  AL132221
VERSION     AL132221.1 GI:6114167
KEYWORDS   GSS; genome survey sequence.
SOURCE     Takifugu rubripes (Fugu rubripes)
ORGANISM   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei;
Acanthomorpha; Acanthopterygii; Percomorpha; Tetraodontiformes;
Tetraodontoidea; Tetraodontidae; Takifugu.
REFERENCE  1
AUTHORS    Elgar,G., Clark,M.S., Meek,S., Smith,S., Warner,S., Edwards,Y.J.,
Bouchireb,N., Cottage,A., Yeo,G.S., Umrانيا,Y., Williams,G. and
Brenner,S.
TITLE      Generation and analysis of 25 Mb of genomic DNA from the pufferfish
Fugu rubripes by sequence scanning
JOURNAL    Genome Res. 9 (10), 960-971 (1999)
MEDLINE    99455097
PUBMED     10523524
REFERENCE  2 (bases 1 to 169)
AUTHORS    Elgar,G., Clark,M.S., Smith,S., Meek,S., Warner,S., Edwards,Y.J.K.,
Umrانيا,Y., Williams,G. and Brenner,S.
TITLE      Direct Submission
JOURNAL    Submitted (11-OCT-1999) MRC Human Genome Mapping Project Resource
Centre, Hinxton, Cambridge, CB10 1SB. UK Email:
biohelp@hgm.mrc.ac.uk
COMMENT    Vector: pBluescript II KS
V.type: phagemid
PRIMER: KS
DESCR:
One pass dye-terminator sequencing of cosmid cloned genomic
sequence.
FEATURES
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      1..169
        /organism="Takifugu rubripes"
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ORIGIN
  Query Match      100.0%; Score 10; DB 9; Length 169;
  Best Local Similarity 100.0%; Pred. No. 1.1e+04;
  Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 145 CGAACGTTTCG 136

RESULT 77
AU241486
LOCUS      174 bp      mRNA      linear      EST 15-JAN-2002
DEFINITION AU241486 UV irradiated OHLNI cell line cDNA library (OLc) Oryzias

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/mol_type="genomic DNA"
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/clone_lib="192G14fD11"
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ORIGIN
  Query Match      100.0%; Score 10; DB 9; Length 169;
  Best Local Similarity 100.0%; Pred. No. 1.1e+04;
  Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 136 CGAACGTTTCG 145

RESULT 76
FR0044729/c
LOCUS      169 bp      DNA      linear      GSS 25-FEB-2004
DEFINITION Fugu rubripes GSS sequence, clone 192G14fD11, genomic survey
sequence.
ACCESSION  AL132221
VERSION     AL132221.1 GI:6114167
KEYWORDS   GSS; genome survey sequence.
SOURCE     Takifugu rubripes (Fugu rubripes)
ORGANISM   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei;
Acanthomorpha; Acanthopterygii; Percomorpha; Tetraodontiformes;
Tetraodontoidea; Tetraodontidae; Takifugu.
REFERENCE  1
AUTHORS    Elgar,G., Clark,M.S., Meek,S., Smith,S., Warner,S., Edwards,Y.J.,
Bouchireb,N., Cottage,A., Yeo,G.S., Umrانيا,Y., Williams,G. and
Brenner,S.
TITLE      Generation and analysis of 25 Mb of genomic DNA from the pufferfish
Fugu rubripes by sequence scanning
JOURNAL    Genome Res. 9 (10), 960-971 (1999)
MEDLINE    99455097
PUBMED     10523524
REFERENCE  2 (bases 1 to 169)
AUTHORS    Elgar,G., Clark,M.S., Smith,S., Meek,S., Warner,S., Edwards,Y.J.K.,
Umrانيا,Y., Williams,G. and Brenner,S.
TITLE      Direct Submission
JOURNAL    Submitted (11-OCT-1999) MRC Human Genome Mapping Project Resource
Centre, Hinxton, Cambridge, CB10 1SB. UK Email:
biohelp@hgm.mrc.ac.uk
COMMENT    Vector: pBluescript II KS
V.type: phagemid
PRIMER: KS
DESCR:
One pass dye-terminator sequencing of cosmid cloned genomic
sequence.
FEATURES
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    Location/Qualifiers
      1..169
        /organism="Takifugu rubripes"
        /mol_type="genomic DNA"
        /db_xref="taxon:31033"
        /clone_lib="192G14fD11"
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  Best Local Similarity 100.0%; Pred. No. 1.1e+04;
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Qy 1 CGAACGTTTCG 10
Db 145 CGAACGTTTCG 136

RESULT 77
AU241486
LOCUS      174 bp      mRNA      linear      EST 15-JAN-2002
DEFINITION AU241486 UV irradiated OHLNI cell line cDNA library (OLc) Oryzias

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	latipes cDNA clone OLC51.06d, mRNA sequence. AU241486 VERSION AU241486.1 GI:18154065 KEYWORDS EST. SOURCE Oryzias latipes (Japanese medaka) ORGANISM Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei; Acanthomorpha; Acanthopterygii; Percomorpha; Atherinomorpha; Belontiiformes; Adrianichthyidae; Oryziinae; Oryzias.
REFERENCE	1 (bases 1 to 174)
AUTHORS	Naruse,K., Mitani,H. and Tanaka,M.
TITLE	Medaka EST Project in University of Tokyo (2001)
JOURNAL	Unpublished (2001)
COMMENT	Contact: Kiyoshi Naruse Department of Biological Sciences Graduate School of Science, University of Tokyo Hongo 7-3-1, Bunkyo-ku, Tokyo 113-0033, Japan Tel: 81-3-5841-4443 Fax: 81-3-5841-4410 Email: naruse@biol.s.u-tokyo.ac.jp This clone was isolated from UV irradiated OLHNI cell line cdNA library (OLC) 5' end sequences.
FEATURES	Location/Qualifiers source 1..174 /organism="Oryzias latipes" /mol_type="mRNA" /strain="HNI" /db_xref="taxon:8090" /clone="OLC51.06d" /clone_lib="UV irradiated OLHNI cell line cdNA library (OLC)"
ORIGIN	
Query Match	100.0%; Score 10; DB 1; Length 174;
Best Local Similarity	100.0%; Pred. No. 1.1e+04;
Matches	10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY	1 CGAACGTTTCG 10
Db	94 CGAACGTTTCG 103
RESULT 78	
AU241486/c	
LOCUS	174 bp mRNA linear EST 15-JAN-2002
DEFINITION	AU241486 UV irradiated OLHNI cell line cdNA library (OLC) Oryzias latipes cDNA clone OLC51.06d, mRNA sequence.
ACCESSION	AU241486
VERSION	AU241486.1 GI:18154065
KEYWORDS	EST.
SOURCE	Oryzias latipes (Japanese medaka) Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei; Acanthomorpha; Acanthopterygii; Percomorpha; Atherinomorpha; Belontiiformes; Adrianichthyidae; Oryziinae; Oryzias.
REFERENCE	1 (bases 1 to 174)
AUTHORS	Naruse,K., Mitani,H. and Tanaka,M.
TITLE	Medaka EST Project in University of Tokyo (2001)
JOURNAL	Unpublished (2001)
COMMENT	Contact: Kiyoshi Naruse Department of Biological Sciences Graduate School of Science, University of Tokyo Hongo 7-3-1, Bunkyo-ku, Tokyo 113-0033, Japan Tel: 81-3-5841-4443 Fax: 81-3-5841-4410 Email: naruse@biol.s.u-tokyo.ac.jp This clone was isolated from UV irradiated OLHNI cell line cdNA library (OLC) 5' end sequences.
FEATURES	Location/Qualifiers source 1..174 /organism="Oryzias latipes" /mol_type="mRNA" /strain="HNI" /db_xref="taxon:8090" /clone="OLC51.06d" /clone_lib="UV irradiated OLHNI cell line cdNA library (OLC)"
ORIGIN	
Query Match	100.0%; Score 10; DB 1; Length 174;
Best Local Similarity	100.0%; Pred. No. 1.1e+04;
Matches	10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY	1 CGAACGTTTCG 10
Db	94 CGAACGTTTCG 103
RESULT 79	
AU241486/c	
LOCUS	175 bp mRNA linear GSS 02-OCT-2003
DEFINITION	OST241558 Mus musculus 129Sv/Ev Mus musculus cDNA clone OST241558, mRNA sequence.
ACCESSION	CG589375
VERSION	CG589375.1 GI:37395128
KEYWORDS	GSS.
SOURCE	Mus musculus (house mouse) Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
REFERENCE	1 (bases 1 to 175)
AUTHORS	Zambrowicz,B.P., Abuin,A., Ramirez-Solis,R., Richter,I.J., Piggott,J., Gupta,A., Hansen,G., Hu,Y., Huang,W., Jaing,C., Friddle,C.J., Kipp,P., Kohlhauff,B., Ma,Z.-Q., Markesich,D., Key,B.W. Jr., Potter,D.G., Qian,N., Shaw,J., Schrick,J., Shi,Z.-Z., Payne,R., Van Slightenhorst,I., Vogel,P., Walke,W., Xu,N., Sparks,M.J., Van Sligtenhorst,A.T. Zhao,Q., Person,C. and Sands,A.T. Wnk1 kinase deficiency lowers blood pressure in mice: a gene-trap screen to identify potential targets for therapeutic intervention
TITLE	
JOURNAL	Proc. Natl. Acad. Sci. U.S.A. 100 (24), 14109-14114 (2003)
COMMENT	Contact: Zambrowicz BP OmniBank Lexicon Genetics Incorporated 4000 Research Forest Drive, The Woodlands, TX 77381, USA Email: materials@lexgen.com Gene trap sequence tag generated by 3' RACE from mouse ES cells as described in Zambrowicz et al (Nature. 1998 Apr 9;392(6676):608-11) Class: Gene Trap. Location/Qualifiers source 1..175 /organism="Mus musculus" /mol_type="mRNA" /db_xref="taxon:10090" /clone="OST241558" /cell_type="embryonic stem cell" /clone_lib="Mus musculus 129Sv/Ev"
ORIGIN	
Query Match	100.0%; Score 10; DB 9; Length 175;
Best Local Similarity	100.0%; Pred. No. 1.1e+04;
Matches	10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY	1 CGAACGTTTCG 10
Db	117 CGAACGTTTCG 126
RESULT 80	
CG589375/c	
LOCUS	175 bp mRNA linear GSS 02-OCT-2003
DEFINITION	OST241558 Mus musculus 129Sv/Ev Mus musculus cDNA clone OST241558, mRNA sequence.

/db xref="taxon:9606"
 /clone="IMAGE:2377675"
 /sex="male"
 /dev_stage="adult, age 25"
 /lab_host="DH10B (phage resistant)"
 /clone_lib="Barstead colon HPLRB7"
 /notes="Organ: colon; Vector: pT7T3D-Pac (Pharmacia) with a modified polylinker; Site 1: EcoRI; Site 2: NotI; 1st strand cDNA was primed with a Not I - oligo(dT) primer [5' TGTTACGAATCTGAAGTGGAGCGCGCCCTTTTTTTTTTTTTTTTTTTT 3']; double-stranded cDNA was ligated to Eco RI adaptors [5' AATTCTAGTAAAT 3' and 5' ATTACTAGT 3'], digested with Not I and cloned into the Not I and Eco RI sites of the modified pT7T3 vector. Library constructed by Bob Barstead."

ORIGIN

Query Match 100.0%; Score 10; DB 1; Length 178;
 Best Local Similarity 100.0%; Pred. No. 1.1e+04;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
 |||||
 Db 15 CGAACGTTTCG 6

RESULT 83

AW890544
 LOCUS QV4-NT0040-170400-175-a06 NT0040 Homo sapiens linear EST 24-MAY-2000
 DEFINITION QV4-NT0040-170400-175-a06 NT0040 Homo sapiens cDNA, mRNA sequence.
 ACCESSION AW890544
 VERSION AW890544.1 GI:8054749
 KEYWORDS EST.
 SOURCE Homo sapiens (human)

ORGANISM

Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE

AUTHORS 1 (bases 1 to 179)
 Dias Neto,E., Garcia Correa,R., Verjovski-Almeida,S., Briones,M.R., Nagai,M.A., da Silva,W. Jr., Zago,M.A., Bordin,S., Costa,F.F., Goldman,G.H., Carvalho,A.F., Matsukuma,A., Baia,G.S., Simpson,D.H., Brunstein,A., deOliveira,P.S., Bucher,P., Jongeneel,C.V., O'Hare,M.J., Soares,F., Brentani,R.R., Reis,L.F., de Souza,S.J. and Simpson,A.J.
 Shotgun sequencing of the human transcriptome with ORF expressed sequence tags

JOURNAL Proc. Natl. Acad. Sci. U.S.A. 97 (7), 3451-3496 (2000)

MEDLINE 20202663

PUBMED 10737800

COMMENT

Contact: Simpson A.J.G.
 Laboratory of Cancer Genetics
 Ludwig Institute for Cancer Research
 Rua Prof. Antonio Prudente 109, 4 andar, 01509-010, Sao Paulo-SP, Brazil
 Tel: +55-11-2704922
 Fax: +55-11-2707001
 Email: asimpson@ludwig.org.br

This sequence was derived from the FAPESP/LICR Human Cancer Genome Project. This entry can be seen in the following URL

(http://www.ludwig.org.br/scripts/gethtml2.pl?tl=et2=QV4-NT0040-170

400-175-a06&t3=2000-04-17&t4=1)

Seq primer: puc 18 forward

High quality sequence start: 39

High quality sequence stop: 179.

Location/Qualifiers

1. 179

/organism="Homo sapiens"

/mol_type="mRNA"

/db_xref="taxon:9606"

/dev_stage="Adult"

/clone_lib="NT0040"

/notes="Organ: nervous_tumor; Vector: puc18; Site 1: SmaI;

Site 2: SmaI; A mini-library was made by cloning products

derived from ORESTES PCR (U.S. Letters Patent application

No. 196,716 - Ludwig Institute for Cancer Research)

profiles into the pUC 18 vector. Reverse transcription of

tissue mRNA and cDNA amplification were performed under

low stringency conditions."

ORIGIN

Query Match 100.0%; Score 10; DB 2; Length 179;
 Best Local Similarity 100.0%; Pred. No. 1.1e+04;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
 |||||
 Db 33 CGAACGTTTCG 42

RESULT 84

AW890544/c

LOCUS QV4-NT0040-170400-175-a06 NT0040 Homo sapiens linear EST 24-MAY-2000

DEFINITION QV4-NT0040-170400-175-a06 NT0040 Homo sapiens cDNA, mRNA sequence.

ACCESSION AW890544

VERSION AW890544.1 GI:8054749

KEYWORDS EST.

SOURCE Homo sapiens (human)

ORGANISM Homo sapiens

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE 1 (bases 1 to 179)

AUTHORS Dias Neto,E., Garcia Correa,R., Verjovski-Almeida,S., Briones,M.R., Nagai,M.A., da Silva,W. Jr., Zago,M.A., Bordin,S., Costa,F.F., Goldman,G.H., Carvalho,A.F., Matsukuma,A., Baia,G.S., Simpson,D.H., Brunstein,A., deOliveira,P.S., Bucher,P., Jongeneel,C.V., O'Hare,M.J., Soares,F., Brentani,R.R., Reis,L.F., de Souza,S.J. and Simpson,A.J.

Shotgun sequencing of the human transcriptome with ORF expressed

sequence tags

JOURNAL Proc. Natl. Acad. Sci. U.S.A. 97 (7), 3491-3496 (2000)

MEDLINE 20202663

PUBMED 10737800

COMMENT Contact: Simpson A.J.G.

Laboratory of Cancer Genetics

Ludwig Institute for Cancer Research

Rua Prof. Antonio Prudente 109, 4 andar, 01509-010, Sao Paulo-SP, Brazil

Tel: +55-11-2704922

Fax: +55-11-2707001

Email: asimpson@ludwig.org.br

This sequence was derived from the FAPESP/LICR Human Cancer Genome Project. This entry can be seen in the following URL

(http://www.ludwig.org.br/scripts/gethtml2.pl?tl=et2=QV4-NT0040-170

400-175-a06&t3=2000-04-17&t4=1)

Seq primer: puc 18 forward

High quality sequence start: 39

High quality sequence stop: 179.

Location/Qualifiers

1. 179

/organism="Homo sapiens"

/mol_type="mRNA"

/db_xref="taxon:9606"

/dev_stage="Adult"

/clone_lib="NT0040"

/notes="Organ: nervous_tumor; Vector: puc18; Site 1: SmaI;

Site 2: SmaI; A mini-library was made by cloning products

derived from ORESTES PCR (U.S. Letters Patent application

No. 196,716 - Ludwig Institute for Cancer Research)

profiles into the pUC 18 vector. Reverse transcription of

tissue mRNA and cDNA amplification were performed under

low stringency conditions."

Query Match 100.0%; Score 10; DB 2; Length 179;

Best Local Similarity 100.0%; Pred. No. 1.1e+04;

Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy 1 CGAACGTTTCG 10
Db 42 CGAACGTTTCG 33

RESULT 85
BZ892989
LOCUS HL10_0122 H1 pUC18 Library Halorubrum lacusprofundi genomic 5',
DEFINITION genomic survey sequence.
ACCESSION BZ892989
VERSION BZ892989.1 GI:33343579
KEYWORDS GSS.
SOURCE Halorubrum lacusprofundi
ORGANISM Halorubrum lacusprofundi
Archaea; Euryarchaeota; Halobacteria; Halobacteriales;
Halobacteriaceae; Halorubrum.
REFERENCE 1 (bases 1 to 180)
AUTHORS Goo, Y., Roach, J., Glusman, G., Baliga, N.S., Deutsch, K., Pan, M.,
DasSarma, S., Ng, W.V. and Hood, L.
TITLE Low-pass Sequencing for Microbial Comparative Genomics
JOURNAL Unpublished (2003)
COMMENT Contact: Goo Y
Institute for Systems Biology
1441 North 34th Street, Seattle, WA 98103, USA
Tel: 206 732 1412
Fax: 206 732 1299
Email: ygoo@systemsbiology.org
Seq primer: M13 Forward
Class: shotgun.

FEATURES             Location/Qualifiers
     source            1..180
                        /organism="Halorubrum lacusprofundi"
                        /mol_type="genomic DNA"
                        /strain="ATCC 49239"
                        /db_xref="taxon:2247"
                        /clone_lib="H1 pUC18 Library"
                        /note="Vector: pUC18; Site 1: SmaI; A shotgun library was
                        constructed from Halorubrum lacusprofundi genomic DNA
                        using pUC18/SmaI/BAP plasmid"

ORIGIN
100.0%; Score 10; DB 8; Length 180;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 158 CGAACGTTTCG 149

RESULT 87
BZ549081
LOCUS BX549081 181 bp mRNA linear EST 10-OCT-2003
DEFINITION BX549081 Glossina morsitans morsitans adult infected gut Glossina
morsitans morsitans cDNA clone tsei05907_glc, mRNA sequence.
ACCESSION BX549081
VERSION BX549081.1 GI:33299278
KEYWORDS EST.
SOURCE Glossina morsitans morsitans
ORGANISM Glossina morsitans morsitans
Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha;
Hippoboscidae; Glossinidae; Glossina.
REFERENCE 1 (bases 1 to 181)
AUTHORS Lehane, M.J., Aksoy, S., Gibson, W., Kerkhoun, A., Berriman, M.,
Hamilton, J., Soares, M.B., Bonaldo, M.F., Lehane, S. and Hall, N.
TITLE Adult midgut expressed sequence tags from the tsetse fly Glossina
morsitans morsitans and expression analysis of putative immune
response genes
JOURNAL Genome Biol. 4 (10), R63 (2003)
MEDLINE 22881942
PUBMED 14513198
COMMENT Contact: Hall N
Pathogen Sequencing Unit
The Sanger Institute The Wellcome Trust Genome Campus
Hinxton, Cambridge, CB10 1SA, UK
Request for clones, please contact: Mike Lehane
Prof. M.J. Lehane
School of Biological Sciences,
University of Wales,
Bangor LL57 2UW
All clones with suffix glc are reverse primer reads starting at 5'
end of the cDNA all plc reads are from
the 3' end.

FEATURES             Location/Qualifiers
     source            1..181
                        /organism="Glossina morsitans morsitans"
                        /mol_type="mRNA"
                        /sub_species="morsitans"
                        /db_xref="taxon:37546"
                        /clone_xref="tsei05907_glc"
                        /tissue_type="adult infected gut"
                        /clone_lib="Glossina morsitans morsitans adult infected
                        gut"
                        /note="country: Zimbabwe; EST from adult gut infected with
                        T.brucei"

ORIGIN
100.0%; Score 10; DB 8; Length 180;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 149 CGAACGTTTCG 158

RESULT 86
BZ892989/c
LOCUS HL10_0122 H1 pUC18 Library Halorubrum lacusprofundi genomic 5',
DEFINITION genomic survey sequence.
ACCESSION BZ892989
VERSION BZ892989.1 GI:33343579
KEYWORDS GSS.
SOURCE Halorubrum lacusprofundi
ORGANISM Halorubrum lacusprofundi
Archaea; Euryarchaeota; Halobacteria; Halobacteriales;
Halobacteriaceae; Halorubrum.
REFERENCE 1 (bases 1 to 180)
AUTHORS Goo, Y., Roach, J., Glusman, G., Baliga, N.S., Deutsch, K., Pan, M.,
DasSarma, S., Ng, W.V. and Hood, L.
TITLE Low-pass Sequencing for Microbial Comparative Genomics
JOURNAL Unpublished (2003)
COMMENT Contact: Goo Y
Institute for Systems Biology
1441 North 34th Street, Seattle, WA 98103, USA
Tel: 206 732 1412

```

```

Fax: 206 732 1299
Email: ygoo@systemsbiology.org
Seq primer: M13 Forward
Class: shotgun.

FEATURES             Location/Qualifiers
     source            1..180
                        /organism="Halorubrum lacusprofundi"
                        /mol_type="genomic DNA"
                        /strain="ATCC 49239"
                        /db_xref="taxon:2247"
                        /clone_lib="H1 pUC18 Library"
                        /note="Vector: pUC18; Site 1: SmaI; A shotgun library was
                        constructed from Halorubrum lacusprofundi genomic DNA
                        using pUC18/SmaI/BAP plasmid"

ORIGIN
100.0%; Score 10; DB 8; Length 180;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 158 CGAACGTTTCG 149

RESULT 87
BZ549081
LOCUS BX549081 181 bp mRNA linear EST 10-OCT-2003
DEFINITION BX549081 Glossina morsitans morsitans adult infected gut Glossina
morsitans morsitans cDNA clone tsei05907_glc, mRNA sequence.
ACCESSION BX549081
VERSION BX549081.1 GI:33299278
KEYWORDS EST.
SOURCE Glossina morsitans morsitans
ORGANISM Glossina morsitans morsitans
Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha;
Hippoboscidae; Glossinidae; Glossina.
REFERENCE 1 (bases 1 to 181)
AUTHORS Lehane, M.J., Aksoy, S., Gibson, W., Kerkhoun, A., Berriman, M.,
Hamilton, J., Soares, M.B., Bonaldo, M.F., Lehane, S. and Hall, N.
TITLE Adult midgut expressed sequence tags from the tsetse fly Glossina
morsitans morsitans and expression analysis of putative immune
response genes
JOURNAL Genome Biol. 4 (10), R63 (2003)
MEDLINE 22881942
PUBMED 14513198
COMMENT Contact: Hall N
Pathogen Sequencing Unit
The Sanger Institute The Wellcome Trust Genome Campus
Hinxton, Cambridge, CB10 1SA, UK
Request for clones, please contact: Mike Lehane
Prof. M.J. Lehane
School of Biological Sciences,
University of Wales,
Bangor LL57 2UW
All clones with suffix glc are reverse primer reads starting at 5'
end of the cDNA all plc reads are from
the 3' end.

FEATURES             Location/Qualifiers
     source            1..181
                        /organism="Glossina morsitans morsitans"
                        /mol_type="mRNA"
                        /sub_species="morsitans"
                        /db_xref="taxon:37546"
                        /clone_xref="tsei05907_glc"
                        /tissue_type="adult infected gut"
                        /clone_lib="Glossina morsitans morsitans adult infected
                        gut"
                        /note="country: Zimbabwe; EST from adult gut infected with
                        T.brucei"

ORIGIN
100.0%; Score 10; DB 8; Length 180;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```

Query Match 100.0%; Score 10; DB 5; Length 181;
 Best Local Similarity 100.0%; Pred. No. 1.1e+04;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
 Db 71 CGAACGTTTCG 80

RESULT 88
 BX549081/c
 LOCUS
 DEFINITION BX549081 Glossina morsitans morsitans adult infected gut Glossina EST 10-OCT-2003
 morsitans morsitans cDNA clone Tse105g07_q1c, mRNA sequence.

ACCESSION BX549081
 VERSION BX549081.1 GI:33299278
 KEYWORDS EST.
 SOURCE Glossina morsitans morsitans
 ORGANISM Glossina morsitans morsitans

REFERENCE 1 (bases 1 to 181)
 AUTHORS Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota; Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha; Hippoboscidae; Glossinidae; Glossina.
 TITLE Adult midgut expressed sequence tags from the tsetse fly Glossina morsitans morsitans and expression analysis of putative immune response genes
 JOURNAL Genome Biol. 4 (10), R63 (2003)
 MEDLINE 22881942
 PUBMED 14519198
 COMMENT Contact: Hall N
 Pathogen Sequencing Unit
 The Sanger Institute The Wellcome Trust Genome Campus
 Hinxton, Cambridge, CB10 1SA, UK
 Request for clones, please contact: Mike Lehane
 Prof. M.J. Lehane
 School of Biological Sciences,
 University of Wales,
 Bangor LL57 2UW
 All clones with suffix q1c are reverse primer reads starting at 5' end of the cDNA all q1c reads are from the 3' end.

FEATURES
 source
 1..181
 /organism="Glossina morsitans morsitans"
 /mol_type="mRNA"
 /sub_species="morsitans"
 /db_xref="taxon:37546"
 /clone="Tse105g07_q1c"
 /tissue_type="adult infected gut"
 /clone_lib="Glossina morsitans morsitans adult infected gut"
 /note="Country: Zimbabwe; EST from adult gut infected with T. brucei"

ORIGIN
 Query Match 100.0%; Score 10; DB 5; Length 181;
 Best Local Similarity 100.0%; Pred. No. 1.1e+04;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
 Db 80 CGAACGTTTCG 71

RESULT 89
 CD892110
 LOCUS
 DEFINITION CD892110 182 bp mRNA linear EST 14-JUL-2003
 G118.119P15F010724 G118 Triticum aestivum cDNA clone G118119P15, mRNA sequence.

ACCESSION CD892110
 VERSION CD892110.1 GI:32662519

KEYWORDS EST.
 SOURCE Triticum aestivum (bread wheat)
 ORGANISM Triticum aestivum

REFERENCE 1 (bases 1 to 182)
 AUTHORS Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; Poideae; Triticeae; Triticum.
 TITLE Genoplatte.
 JOURNAL Genoplatte, a major partnership french program in plant genomics
 COMMENT Unpublished (2003)
 CONTACT: Genoplatte
 Genoplatte
 93, rue Henri Rochefort 91025 EVRY CEDEX France
 Tel: 33 1 69 47 54 00
 Fax: 33 1 69 47 54 10
 This sequence has been generated in the framework of the french plant genomics programme 'Genoplatte' (<http://www.genoplatte.com>) and <http://genoplatte-info.infobiogen.fr>.

FEATURES
 source
 1..182
 /organism="Triticum aestivum"
 /mol_type="mRNA"
 /cultivar="recital"
 /db_xref="taxon:4565"
 /clone="G118119P15"
 /tissue_type="grain (118 degrees per day after pollination)"
 /clone_lib="G118"

ORIGIN
 Query Match 100.0%; Score 10; DB 6; Length 182;
 Best Local Similarity 100.0%; Pred. No. 1.1e+04;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
 Db 76 CGAACGTTTCG 85

RESULT 90
 CD892110/c
 LOCUS
 DEFINITION CD892110 182 bp mRNA linear EST 14-JUL-2003
 G118.119P15F010724 G118 Triticum aestivum cDNA clone G118119P15, mRNA sequence.

ACCESSION CD892110
 VERSION CD892110.1 GI:32662519
 KEYWORDS EST.
 SOURCE Triticum aestivum (bread wheat)
 ORGANISM Triticum aestivum

REFERENCE 1 (bases 1 to 182)
 AUTHORS Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; Poideae; Triticeae; Triticum.
 TITLE Genoplatte.
 JOURNAL Genoplatte, a major partnership french program in plant genomics
 COMMENT Unpublished (2003)
 CONTACT: Genoplatte
 Genoplatte
 93, rue Henri Rochefort 91025 EVRY CEDEX France
 Tel: 33 1 69 47 54 00
 Fax: 33 1 69 47 54 10
 This sequence has been generated in the framework of the french plant genomics programme 'Genoplatte' (<http://www.genoplatte.com>) and <http://genoplatte-info.infobiogen.fr>.

FEATURES
 source
 1..182
 /organism="Triticum aestivum"
 /mol_type="mRNA"
 /cultivar="recital"
 /db_xref="taxon:4565"
 /clone="G118119P15"
 /tissue_type="grain (118 degrees per day after pollination)"

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ORIGIN
Query Match      100.0%; Score 10; DB 6; Length 182;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 85 CGAACGTTTCG 76

RESULT 91
BM031196
LOCUS      183 bp mRNA linear EST 05-NOV-2001
DEFINITION 496534 MARC 2BOV Bos taurus cDNA 5', mRNA sequence.
ACCESSION  BM031196
VERSION     BM031196.1 GI:16744766
KEYWORDS   EST.
SOURCE     Bos taurus (cow)
ORGANISM   Bos taurus
            Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
            Bovinae; Bos.
REFERENCE  1 (bases 1 to 183)
AUTHORS   Smith,T.P.L., Grosse,W.M., Freking,B.A., Roberts,A.J., Stone,R.T.,
            Casas,E., Wray,J.E., White,J., Cho,J., Fahrenkrug,S.C.,
            Bennett,G.L., Heaton,M.P., Laegreid,W.W., Rohrer,G.A.,
            Chitko-McKown,C.G., Perte,G., Holt,I., Karamycheva,S., Liang,F.,
            Quackenbush,J. and Keefe,J.W.
TITLE     Sequence evaluation of four pooled-tissue normalized bovine cDNA
            libraries and construction of a gene index for cattle
JOURNAL   Genome Res. 11 (4), 626-630 (2001)
MEDLINE   21180013
PUBMED    11282978
COMMENT   Contact: Smith TPL
            USDA, ARS, US Meat Animal Research Center
            PO Box 166, Clay Center, NE 68933-0166, USA
            Tel: 402 762 4366
            Fax: 402 762 4390
            Email: smith@email.marc.usda.gov
            Single pass sequencing. Bases called and alt trimmed with phred
            v0.980904.e. Vector identified by cross_match with the -minscore 18
            and -mismatch 12 options.
PCR Primers
FORWARD: AGGAACAGCTATGACCAT
BACKWARD: GTTTCCTCAGTCACGACG
Plate: 131 row: C column: 15
Seq primer: ATTAGGTGACACTATAG.
            Location/Qualifiers
                1..183
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                /mol_type="mRNA"
                /db_xref="taxon:9913"
                /tissue_type="pooled"
                /lab_host="DH10B"
                /clone_lib="MARC 2BOV"
                /note="Vector: pCMV SPORT6; Site 1: NotI; Site 2: SalI;
                Library made from pooled tissue from testis, thymus,
                semitendinosus muscle, longissimus muscle, pancreas,
                adrenal, and endometrium."

FEATURES
source
Query Match      100.0%; Score 10; DB 4; Length 183;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 51 CGAACGTTTCG 42

ORIGIN
Query Match      100.0%; Score 10; DB 4; Length 183;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 42 CGAACGTTTCG 51

RESULT 92

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BM031196/c
LOCUS      183 bp mRNA linear EST 05-NOV-2001
DEFINITION 496534 MARC 2BOV Bos taurus cDNA 5', mRNA sequence.
ACCESSION  BM031196
VERSION     BM031196.1 GI:16744766
KEYWORDS   EST.
SOURCE     Bos taurus (cow)
ORGANISM   Bos taurus
            Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
            Bovinae; Bos.
REFERENCE  1 (bases 1 to 183)
AUTHORS   Smith,T.P.L., Grosse,W.M., Freking,B.A., Roberts,A.J., Stone,R.T.,
            Casas,E., Wray,J.E., White,J., Cho,J., Fahrenkrug,S.C.,
            Bennett,G.L., Heaton,M.P., Laegreid,W.W., Rohrer,G.A.,
            Chitko-McKown,C.G., Perte,G., Holt,I., Karamycheva,S., Liang,F.,
            Quackenbush,J. and Keefe,J.W.
TITLE     Sequence evaluation of four pooled-tissue normalized bovine cDNA
            libraries and construction of a gene index for cattle
JOURNAL   Genome Res. 11 (4), 626-630 (2001)
MEDLINE   21180013
PUBMED    11282978
COMMENT   Contact: Smith TPL
            USDA, ARS, US Meat Animal Research Center
            PO Box 166, Clay Center, NE 68933-0166, USA
            Tel: 402 762 4366
            Fax: 402 762 4390
            Email: smith@email.marc.usda.gov
            Single pass sequencing. Bases called and alt trimmed with phred
            v0.980904.e. Vector identified by cross_match with the -minscore 18
            and -mismatch 12 options.
PCR Primers
FORWARD: AGGAACAGCTATGACCAT
BACKWARD: GTTTCCTCAGTCACGACG
Plate: 131 row: C column: 15
Seq primer: ATTAGGTGACACTATAG.
            Location/Qualifiers
                1..183
                /organism="Bos taurus"
                /mol_type="mRNA"
                /db_xref="taxon:9913"
                /tissue_type="pooled"
                /lab_host="DH10B"
                /clone_lib="MARC 2BOV"
                /note="Vector: pCMV SPORT6; Site 1: NotI; Site 2: SalI;
                Library made from pooled tissue from testis, thymus,
                semitendinosus muscle, longissimus muscle, pancreas,
                adrenal, and endometrium."

FEATURES
source
Query Match      100.0%; Score 10; DB 4; Length 183;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 51 CGAACGTTTCG 42

ORIGIN
Query Match      100.0%; Score 10; DB 4; Length 183;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 51 CGAACGTTTCG 42

RESULT 93
CA701571
LOCUS      186 bp mRNA linear EST 26-NOV-2002
DEFINITION wkm2c.pk006.f8 wkm2c Triticum aestivum cDNA clone wkm2c.pk006.f8 5',
            end, mRNA sequence.
ACCESSION  CA701571
VERSION     CA701571.1 GI:25423364
KEYWORDS   EST.
SOURCE     Triticum aestivum (bread wheat)
ORGANISM   Triticum aestivum
            Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
            Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae;
            Pooideae; Triticeae; Triticum.
REFERENCE  1 (bases 1 to 186)

```

AUTHORS
 Tingey,S.V., Powell,W., Wolters,P., Dolan,M., Hainey,C., Yuan,Z.,
 Miao,G., Caraher,N. and Hanafey,M.K.
TITLE
 DuPont Wheat cDNA Sequence
JOURNAL
 Unpublished (2002)
COMMENT
 Contact: Scott V. Tingey
 Crop Genetics
 E. I. DuPont de Nemours and Company
 1 Innovation Way, P.O. Box 6104, Newark, DE 19714-6104, USA
 Tel: 302-631-2602
 Fax: 302-631-2607
 Email: Scott.V.Tingey@USA.dupont.com
 Seq primer: M13.

FEATURES

source
 Location/Qualifiers
 1..186
 /organism="Triticum aestivum"
 /mol_type="mRNA"
 /cultivar="hard red spring"
 /db_xref="taxon:4565"
 /clone="wkm2c.pk006.f8"
 /tissue_type="kernel"
 /lab_host="DH10B"
 /clone_lib="wkm2c"
 /note="Site 1: EcoRI; Site 2: XhoI; Wheat (Triticum
 aestivum L.) kernel malted 175 hours at 4 C"
ORIGIN
 Query Match 100.0%; Score 10; DB 6; Length 186;
 Best Local Similarity 100.0%; Pred. No. 1.1e+04;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 1 CGAACGTTTCG 10
 |||||
 Db 120 CGAACGTTTCG 129

RESULT 94
 CA701571/c
LOCUS
 DEFINITION
 wkm2c.pk006.f8 wkm2c Triticum aestivum cDNA clone wkm2c.pk006.f8 5'
 end, mRNA sequence.
 CA701571
ACCESSION
 CA701571.1 GI:25423364
KEYWORDS
 EST.
SOURCE
 Triticum aestivum (bread wheat)
ORGANISM
 Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
 Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae;
 Poideae; Triticeae; Triticum.
 1 (bases 1 to 186)
 Tingey,S.V., Powell,W., Wolters,P., Dolan,M., Hainey,C., Yuan,Z.,
 Miao,G., Caraher,N. and Hanafey,M.K.
TITLE
 DuPont Wheat cDNA Sequence
JOURNAL
 Unpublished (2002)
COMMENT
 Contact: Scott V. Tingey
 Crop Genetics
 E. I. DuPont de Nemours and Company
 1 Innovation Way, P.O. Box 6104, Newark, DE 19714-6104, USA
 Tel: 302-631-2602
 Fax: 302-631-2607
 Email: Scott.V.Tingey@USA.dupont.com
 Seq primer: M13.

FEATURES

source
 Location/Qualifiers
 1..186
 /organism="Triticum aestivum"
 /mol_type="mRNA"
 /cultivar="hard red spring"
 /db_xref="taxon:4565"
 /clone="wkm2c.pk006.f8"
 /tissue_type="kernel"
 /lab_host="DH10B"
 /clone_lib="wkm2c"
 /note="Site 1: EcoRI; Site 2: XhoI; Wheat (Triticum
 aestivum L.) kernel malted 175 hours at 4 C"

ORIGIN

Query Match 100.0%; Score 10; DB 6; Length 186;
 Best Local Similarity 100.0%; Pred. No. 1.1e+04;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 1 CGAACGTTTCG 10
 |||||
 Db 129 CGAACGTTTCG 120

RESULT 95

CNS03DYS
LOCUS
 DEFINITION
 Tetraodon nigroviridis genome survey sequence PUC-ori end of clone
 019015 of library G from Tetraodon nigroviridis, genomic survey
 sequence.
 AL239724
 VERSION
 AL239724.1 GI:7898859
KEYWORDS
 GSS; genome survey sequence.
SOURCE
 Tetraodon nigroviridis
ORGANISM
 Tetraodon nigroviridis
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei;
 Acanthomorpha; Acanthopterygii; Percomorpha; Tetraodontiformes;
 Tetraodontoidea; Tetraodontidae; Tetraodon.
 1
 Roest Crolius,H., Jaillon,O., Dasilva,C., Bouneau,L., Fisher,C.,
 Bernot,A., Fizanes,C., Wincker,P., Brottier,P., Quetier,F.,
 Saurin,W. and Weissenbach,J.
TITLE
 Estimate of human gene number provided by genome-wide analysis
 using Tetraodon nigroviridis DNA sequence
JOURNAL
 Nat. Genet. 25 (2), 235-238 (2000)
MEDLINE
 20296633
PUBMED
 10835645
REFERENCE
 2

Roest Crolius,H., Jaillon,O., Dasilva,C., Ozouf-Costaz,C.,
 Fizanes,C., Fischer,C., Bouneau,L., Billault,A., Quetier,F.,
 Saurin,W., Bernot,A. and Weissenbach,J.
TITLE
 Characterization and repeat analysis of the compact genome of the
 freshwater pufferfish Tetraodon nigroviridis
JOURNAL
 Genome Res. 10 (7), 939-949 (2000)
MEDLINE
 20359837
PUBMED
 10899143
REFERENCE
 3 (bases 1 to 186)
 Direct Submission
 Genoscope.
 Submitted (12-APR-2000) Genoscope - Centre National de Sequencage :
 BP 191 91006 EVRY cedex - FRANCE (E-mail : seqref@genoscope.cns.fr
 - Web : www.genoscope.cns.fr)
COMMENT
 This sequence is a single read and was generated as part of a large
 scale clone-end sequencing project of the Tetraodon nigroviridis
 genome. For more information, please take a look at
 http://www.genoscope.cns.fr/Tetraodon.

FEATURES

source
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 1..186
 /organism="Tetraodon nigroviridis"
 /mol_type="genomic DNA"
 /db_xref="taxon:99883"
 /clone="019015"
 /clone_lib="G"
 /note="Genoscope sequence ID : COBG019AH08SP1-end ;
 PUC-ori"

ORIGIN

Query Match 100.0%; Score 10; DB 9; Length 186;
 Best Local Similarity 100.0%; Pred. No. 1.1e+04;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 1 CGAACGTTTCG 10
 |||||
 Db 18 CGAACGTTTCG 27

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RESULT 96
CNS03DYR/c
LOCUS
DEFINITION
Tetraodon nigroviridis genome survey sequence PUC-ORI end of clone
019015 of library G from Tetraodon nigroviridis, genomic survey
sequence.
AL239724
ACCESSION
AL239724.1 GI:7899859
VERSION
GSS; genome survey sequence.
KEYWORDS
Tetraodon nigroviridis
SOURCE
Tetraodon nigroviridis
ORGANISM
Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
Actinopterygii; Neopterygii; Teleostei; Euteleostei; Neoteleostei;
Acanthopterygii; Acanthopterygii; Perciformes; Tetraodontiformes;
Tetraodontidae; Tetraodontidae; Tetraodon.
REFERENCE
1 Roest Crolius,H., Jaillon,O., Dasilva,C., Bouneau,L., Fisher,C.,
Bertot,A., Fzanes,C., Winker,P., Brottier,P., Quetier,P.,
Saurin,W. and Weissenbach,J.
Estimate of human gene number provided by genome-wide analysis
using Tetraodon nigroviridis DNA sequence
Nat. Genet. 25 (2), 235-238 (2000)
MEDLINE
20296633
PUBMED
10335645
REFERENCE
2 Roest Crolius,H., Jaillon,O., Dasilva,C., Ozouf-Costaz,C.,
Fizames,C., Fischer,C., Bouneau,L., Billault,A., Quetier,P.,
Saurin,W., Bertot,A. and Weissenbach,J.
Characterization and repeat analysis of the compact genome of the
freshwater pufferfish Tetraodon nigroviridis
Genome Res. 10 (7), 939-949 (2000)
MEDLINE
20359837
PUBMED
10899143
REFERENCE
3 (bases 1 to 186)
Genoscope.
Direct Submission
Submitted (12-APR-2000) Genoscope - Centre National de Sequencage :
BP 191 91006 EVRY cedex - FRANCE (E-mail : seque@genoscope.cns.fr
- Web : www.genoscope.cns.fr)
This sequence is a single read and was generated as part of a large
scale clone-end sequencing project of the Tetraodon nigroviridis
genome. For more information, please take a look at
http://www.genoscope.cns.fr/Tetraodon.
FEATURES
source
Location/Qualifiers
1..186
/organism="Tetraodon nigroviridis"
/mol_type="genomic DNA"
/db_xref="taxon:99883"
/clone_lib="G"
/clone_libs="G"
/note="Genoscope sequence ID : C05G019AH08SP1-end :
PUC-ORI"
ORIGIN
Query Match 100.0%; Score 10; DB 9; Length 186;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
|||||
Db 27 CGAACGTTTCG 18

RESULT 97
AI757473
LOCUS
DEFINITION
AI757473 190 bp mRNA linear EST 18-JAN-2000
EctEstal7a09.y1 Eimeria M5-6 Merozoite stage Eimeria tenella cDNA
5' similar to SW:TA4_EIMTE P13399 SPORULATED OOCYST TA4 ANTIGEN
PRECURSOR ;, mRNA sequence.
ACCESSION
AI757473 GI:5151196
VERSION
AI757473.1
KEYWORDS
Eimeria tenella
SOURCE
Eimeria tenella
ORGANISM
Eukaryota; Alveolata; Apicomplexa; Coccidia; Eimeriida; Eimeriidae;
REFERENCE
1 (bases 1 to 190)
AUTHORS
Liberator,P., Diaz,C., Tang,K., Marra,M., Hillier,L., Kucaba,T.,
Martin,J., Wylie,T., Underwood,K., Steptoe,M., Theising,B.,
Allen,M., Bowers,Y., Person,B., Swaller,T., Gibbons,M., Pape,D.,
Harvey,N., Schurk,R., Ritter,E., Kohn,S., Florence,N., Shin,T.,
Jackson,Y., Cardenas,M., McCann,R., Waterston,R., Wilson,R. and
Sibley,D.
WashU-Merck Eimeria tenella project
Unpublished (1999)
JOURNAL
Contact: David Sibley, Ph.D.
COMMENT
WashU-Merck Eimeria tenella project
Washington University School of Medicine
4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108, USA
Tel: 314 286 1800
Fax: 314 286 1810
Email: est@watson.wustl.edu
Contact David Sibley (toxoe@borcim.wustl.edu) for further
information relating to organism, libraries, or clone availability.
Possible reversed clone: similarity on wrong strand
Seq primer: -40RP from Gibco
High quality sequence stop: 1.
Location/Qualifiers
1..190
/organism="Eimeria tenella"
/mol_type="mRNA"
/strain="LS18"
/db_xref="taxon:5802"
/dev_stage="Merozoite"
/lab_host="SOLR E. coli"
/clone_lib="Eimeria M5-6 Merozoite stage"
/note="Vector: Bluescript SK-; Site_1: EcoRI; Site_2:
XhoI; Merozoites were obtained from caecal scrapings of
chickens infected with E. tenella. The library may
contain a small percentage of host or bacterial
contaminants. cDNA was synthesized from poly mRNA using
an oligo-dT primer containing a XhoI site. Following
second strand synthesis, EcoRI adapters were ligated to
the cDNA and products were size-selected on Sephacryl
S500. cDNAs were digested with EcoRI/XhoI and cloned into
lambda Zap II (Stratagene). Clones were converted to
phagemids by mass excision using ExAssist helper phage and
SOLR cells (Stratagene). Insert sizes range from 0.7-1.5
kb."
ORIGIN
Query Match 100.0%; Score 10; DB 1; Length 190;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
|||||
Db 94 CGAACGTTTCG 103

RESULT 98
AI757473/c
LOCUS
DEFINITION
AI757473 190 bp mRNA linear EST 18-JAN-2000
EctEstal7a09.y1 Eimeria M5-6 Merozoite stage Eimeria tenella cDNA
5' similar to SW:TA4_EIMTE P13399 SPORULATED OOCYST TA4 ANTIGEN
PRECURSOR ;, mRNA sequence.
ACCESSION
AI757473 GI:5151196
VERSION
AI757473.1
KEYWORDS
Eimeria tenella
SOURCE
Eimeria tenella
ORGANISM
Eukaryota; Alveolata; Apicomplexa; Coccidia; Eimeriida; Eimeriidae;
REFERENCE
1 (bases 1 to 190)
AUTHORS
Liberator,P., Diaz,C., Tang,K., Marra,M., Hillier,L., Kucaba,T.,

```

Martin, J., Wylie, T., Underwood, K., Steptoe, M., Theising, B., Allen, M., Bowers, Y., Person, B., Swaller, T., Gibbons, M., Pape, D., Harvey, N., Schurk, R., Ritter, E., Kohn, S., Florence, N., Shin, T., Jackson, Y., Cardenas, M., McCann, R., Waterston, R., Wilson, R. and Sibley, D.

WashU-Merck Bimeria tenella project
Unpublished (1999)
Contact: David Sibley, Ph.D.
WashU-Merck Bimeria tenella project
Washington University School of Medicine
4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108, USA
Tel: 314 286 1800
Fax: 314 286 1810
Email: est@watson.wustl.edu

Contact David Sibley (toxoest@borcim.wustl.edu) for further information relating to organism, libraries, or clone availability.
Possible reversed clone: similarity on wrong strand
Seq primer: -40RP from Gibco
High quality sequence stop: 1.

FEATURES

source

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1..190
/organism="Eimeria tenella"
/mol_type="mRNA"
/strain="LS18"
/db_xref="taxon:5802"
/dev_stage="Merozoite"
/lab_host="SOLR E. coli"
/clone_lib="Eimeria MS-6 Merozoite stage"
/notes="Vector: Bluescript SK-; Site 1: EcoRI; Site 2: XhoI; Merozoites were obtained from ceacal scrapings of chickens infected with E. tenella. The library may contain a small percentage of host or bacterial contaminants. cDNA was synthesized from poly mRNA using an oligo-dT primer containing a XhoI site. Following second strand synthesis, EcoRI adapters were ligated to the cDNA and products were size-selected on Sephacryl S500. cDNAs were digested with EcoRI/XhoI and cloned into lambda Zap II (Stratagene). Clones were converted to phagemids by mass excision using ExAssist helper phage and SOLR cells (Stratagene). Insert sizes range from 0.7-1.5 kb."

```

ORIGIN

```

Query Match      100.0%; Score 10; DB 1; Length 190;
Best Local Similarity 100.0%; Pred. NO. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy 1 CGAACGTTTCG 10

|||||

Db 103 CGAACGTTTCG 94

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RESULT 99
BF556292          192 bp mRNA linear EST 12-DEC-2000
LOCUS
DEFINITION
UI-R-Al-em-h-11-0-UI.r1 UI-R-Al Rattus norvegicus cDNA clone
BF556292
ACCESSION
BF556292.1 GI:11666016
VERSION
EST.
KEYWORDS
SOURCE
Rattus norvegicus (Norway rat)
ORGANISM
Rattus norvegicus
Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae;
Rattus.

```

```

REFERENCE
1 (bases 1 to 192)
AUTHORS
Bonaldo, M.F., Lennon, G. and Soares, M.B.
TITLE
Normalization and subtraction: two approaches to facilitate gene
discovery
JOURNAL
Genome Res. 6 (9), 791-806 (1996)
MEDLINE
97044477
PUBMED
8899548
COMMENT
Contact: Soares, MB

```

Coordinated Laboratory for Computational Genomics
University of Iowa
375 Newton Road, 4156 MEBRF, Iowa City, IA 52242, USA
Tel: 319 335 8250
Fax: 319 335 9565
Email: bento-soares@uiowa.edu

cDNA Library Preparation: M.B. Soares Lab Clone distribution:
clones will be available through Research Genetics (www.resgen.com)
This clone is also available through the I.M.A.G.E. Consortium at
LUNL (info@image.llnl.gov). IMAGE ID= 1771558
Seq primer: M13 Forward.

FEATURES

source

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1..192
/organism="Rattus norvegicus"
/mol_type="mRNA"
/strain="Sprague-Dawley"
/db_xref="taxon:10116"
/clone="UI-R-Al-em-h-11-0-UI"
/dev_stage="adult"
/lab_host="DH10B (Life Technologies)"
/clone_lib="UI-R-Al"
/notes="Vector: pT73D-Pac (Pharmacia) with a modified polylinker; Site 1: Not I; Site 2: Eco RI; The UI-R-Al library is a subtracted library derived from the UI-R-A0 library. The UI-R-A0 library consisted of a mixture of individually tagged normalized libraries constructed from rat placenta, adult lung, brain, liver, kidney, heart, spleen, ovary, and muscle. The tag is a string of 3-5 nucleotides present between the Not I site and the oligo-dT track which allows identification of the library of origin of a clone within the mixture. The subtracted library (UI-R-Al) was constructed as follows: PCR amplified cDNA inserts from a pool of approximately 3,840 UI-R-A0 clones from which 3' ESTs had been derived was used as a driver in a hybridization with the UI-R-A0 library in the form of single-stranded circles. The remaining single-stranded circles (subtracted library) was purified by hydroxyapatite column chromatography, converted to double-stranded circles and electroporated into DH10B bacteria (Life Technologies) to generate the UI-R-Al library. This procedure has been previously described (Bonaldo, Lennon and Soares, Genome Research 6: 791-806, 1996)"

```

ORIGIN

```

Query Match      100.0%; Score 10; DB 2; Length 192;
Best Local Similarity 100.0%; Pred. NO. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy 1 CGAACGTTTCG 10

|||||

Db 131 CGAACGTTTCG 140

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RESULT 100
BF556292/c
LOCUS
DEFINITION
UI-R-Al-em-h-11-0-UI.r1 UI-R-Al Rattus norvegicus cDNA clone
BF556292
ACCESSION
BF556292.1 GI:11666016
VERSION
EST.
KEYWORDS
SOURCE
Rattus norvegicus (Norway rat)
ORGANISM
Rattus norvegicus
Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae;
Rattus.

```

```

REFERENCE
1 (bases 1 to 192)
AUTHORS
Bonaldo, M.F., Lennon, G. and Soares, M.B.
TITLE
Normalization and subtraction: two approaches to facilitate gene
discovery
JOURNAL
Genome Res. 6 (9), 791-806 (1996)
MEDLINE
97044477

```

PUBMED
COMMENT

8889548

Contact: Soares, MB
Coordinated Laboratory for Computational Genomics
University of Iowa
375 Newton Road, 4156 MEBRF, Iowa City, IA 52242, USA
Tel: 319 335 8250
Fax: 319 335 9565
Email: bento-soares@uiowa.edu

cdna Library Preparation: M.B. Soares Lab Clone distribution:
clones will be available through Research Genetics (www.resgen.com)
This clone is also available through the I.M.A.G.E. Consortium at
LLNL (linc@image.llnl.gov). IMAGE ID= 1771558
Seq primer: M13 Forward.

FEATURES
source

Location/Qualifiers

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1. .192
/organism="Rattus norvegicus"
/mol_type="mrna"
/strain="Sprague-Dawley"
/db_xref="taxon:10116"
/clone="UI-R-A1-em-h-11-0-UI"
/dev_stage="adult"
/lab_host="DH10B (Life Technologies)"
/clone_lib="UI-R-A1"
/note="Vector: pT73D-Pac (Pharmacia) with a modified
polylinker; Site 1: Not I; Site 2: Eco RI; The UI-R-A1
library is a subtracted library derived from the UI-R-A0
library. The UI-R-A0 library consisted of a mixture of
individually tagged normalized libraries constructed from
rat placenta, adult lung, brain, liver, kidney, heart,
spleen, ovary, and muscle. The tag is a string of 3-5
nucleotides present between the Not I site and the
oligo-dr track which allows identification of the library
of origin of a clone within the mixture. The subtracted
library (UI-R-A1) was constructed as follows: PCR
amplified cDNA inserts from a pool of approximately 3,840
UI-R-A0 clones from which 3' ESTs had been derived was
used as a driver in a hybridization with the UI-R-A0
library in the form of single-stranded circles. The
remaining single-stranded circles (subtracted library) was
purified by hydroxyapatite column chromatography,
converted to double-stranded circles and electroporated
into DH10B bacteria (Life Technologies) to generate the
UI-R-A1 library. This procedure has been previously
described (Bonaldo, Lennon and Soares, Genome Research 6:
791-806, 1996)"
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ORIGIN

Query Match 100.0%; Score 10; DB 2; Length 192;
Best Local Similarity 100.0%; Pred. No. 1.1e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 140 CGAACGTTTCG 131

Search completed: June 30, 2005, 02:04:38
Job time : 1724 secs

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GenCore version 5.1.6
Copyright (c) 1993 - 2005 CompuGen Ltd.

OM nucleic - nucleic search, using sw model

Run on: June 29, 2005, 16:54:07 ; Search time 857.5 Seconds
(without alignments)
565.075 Million cell updates/sec

Title: US-10-033-243-77
Perfect score: 10
Sequence: 1 cgaacgttcg 10

Scoring table: IDENTITY NUC
Gapop 10.0 , Gapext 1.0

Searched: 4708233 seqs, 24227607955 residues

Total number of hits satisfying chosen parameters: 9416466

Minimum DB seq length: 0
Maximum DB seq length: 2000000000
Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 100 summaries

Database : GenEmbl.*

- 1: gb_ba.*
- 2: gb_htg.*
- 3: gb_in.*
- 4: gb_on.*
- 5: gb_ov.*
- 6: gb_pat.*
- 7: gb_ph.*
- 8: gb_pl.*
- 9: gb_pr.*
- 10: gb_ro.*
- 11: gb_sts.*
- 12: gb_sy.*
- 13: gb_un.*
- 14: gb_vi.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	10	100.0	10	6	AX592387 Sequence
2	10	100.0	10	6	AX592387 Sequence
3	10	100.0	11	6	AX592412 Sequence
4	10	100.0	11	6	AX592412 Sequence
5	10	100.0	13	6	AX592407 Sequence
6	10	100.0	13	6	AX592407 Sequence
7	10	100.0	13	6	AX592409 Sequence
8	10	100.0	13	6	AX592409 Sequence
9	10	100.0	14	6	AX592408 Sequence
10	10	100.0	14	6	AX592408 Sequence
11	10	100.0	16	6	AX592321 Sequence
12	10	100.0	16	6	AX592321 Sequence
13	10	100.0	18	6	AX592324 Sequence
14	10	100.0	18	6	AX592324 Sequence
15	10	100.0	19	6	AX592329 Sequence
16	10	100.0	19	6	AX592329 Sequence
17	10	100.0	20	6	AX296868 Sequence
18	10	100.0	20	6	AX296868 Sequence
19	10	100.0	21	6	AX592442 Sequence

93 10 100.0 249 9 HS165A6F Z57132 H.sapiens C
 c 94 10 100.0 249 9 HS165A6F Z57132 H.sapiens C
 95 10 100.0 249 9 HS285551 Z85551 H.sapiens B
 c 96 10 100.0 249 9 HS285551 Z85551 H.sapiens B
 97 10 100.0 250 9 HSA347589 AJ347589 Homo sapi
 c 98 10 100.0 250 9 HSA347589 AJ347589 Homo sapi
 99 10 100.0 254 9 AF303897 AF303897 Homo sapi
 c 100 10 100.0 254 9 AF303897 AF303897 Homo sapi

ALIGNMENTS

RESULT 1
 AX592387
 LOCUS AX592387 10 bp DNA linear PAT 27-JAN-2003
 DEFINITION Sequence 77 from Patent WO02052002.
 ACCESSION AX592387
 VERSION AX592387.1 GI:27950489

KEYWORDS synthetic construct
 SOURCE synthetic construct
 ORGANISM other sequences; artificial sequences.

REFERENCE 1
 AUTHORS Fearon,K.L. and Dina,D.
 TITLE Immunomodulatory polynucleotides and methods of using the same
 JOURNAL Patent: WO 02052002-A 77 04-JUL-2002;
 DYNAX Technologies Corporation (US)
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ORIGIN

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 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
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 Db 1 CGAACGTTTCG 10

RESULT 2
 AX592387/c
 LOCUS AX592387 10 bp DNA linear PAT 27-JAN-2003
 DEFINITION Sequence 77 from Patent WO02052002.
 ACCESSION AX592387
 VERSION AX592387.1 GI:27950489

KEYWORDS synthetic construct
 SOURCE synthetic construct
 ORGANISM other sequences; artificial sequences.

REFERENCE 1
 AUTHORS Fearon,K.L. and Dina,D.
 TITLE Immunomodulatory polynucleotides and methods of using the same
 JOURNAL Patent: WO 02052002-A 77 04-JUL-2002;
 DYNAX Technologies Corporation (US)
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 /note="Polynucleotide containing CG"

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 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10

Db 10 CGAACGTTTCG 1
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RESULT 3
 AX592412
 LOCUS AX592412 11 bp DNA linear PAT 27-JAN-2003
 DEFINITION Sequence 102 from Patent WO02052002.
 ACCESSION AX592412
 VERSION AX592412.1 GI:27950514

KEYWORDS synthetic construct
 SOURCE synthetic construct
 ORGANISM other sequences; artificial sequences.

REFERENCE 1
 AUTHORS Fearon,K.L. and Dina,D.
 TITLE Immunomodulatory polynucleotides and methods of using the same
 JOURNAL Patent: WO 02052002-A 102 04-JUL-2002;
 DYNAX Technologies Corporation (US)
 FEATURES
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 /db_xref="taxon:32630"
 /note="Polynucleotide containing CG"

ORIGIN

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 LOCUS AX592412 11 bp DNA linear PAT 27-JAN-2003
 DEFINITION Sequence 102 from Patent WO02052002.
 ACCESSION AX592412
 VERSION AX592412.1 GI:27950514

KEYWORDS synthetic construct
 SOURCE synthetic construct
 ORGANISM other sequences; artificial sequences.

REFERENCE 1
 AUTHORS Fearon,K.L. and Dina,D.
 TITLE Immunomodulatory polynucleotides and methods of using the same
 JOURNAL Patent: WO 02052002-A 102 04-JUL-2002;
 DYNAX Technologies Corporation (US)
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 /note="Polynucleotide containing CG"

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 LOCUS AX592407 13 bp DNA linear PAT 27-JAN-2003
 DEFINITION Sequence 97 from Patent WO02052002.
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/db_xref="taxon:32630"
/note="Polynucleotide containing CG"

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Db 5 CGAACGTTTCG 14

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LOCUS      AX592408      14 bp      DNA      linear      PAT 27-JAN-2003
DEFINITION Sequence 98 from Patent WO02052002.
ACCESSION  AX592408
VERSION     AX592408.1 GI:27950510
KEYWORDS    .
SOURCE      synthetic construct
ORGANISM    other sequences; artificial sequences.
REFERENCE   1
AUTHORS     Fearon,K.L. and Dina,D.
TITLE       Immunomodulatory polynucleotides and methods of using the same
JOURNAL     Patent: WO 02052002-A 98 04-JUL-2002;
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Db 14 CGAACGTTTCG 5

RESULT 11
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LOCUS      AX592321      16 bp      DNA      linear      PAT 27-JAN-2003
DEFINITION Sequence 11 from Patent WO02052002.
ACCESSION  AX592321
VERSION     AX592321.1 GI:27950423
KEYWORDS    .
SOURCE      synthetic construct
ORGANISM    other sequences; artificial sequences.
REFERENCE   1
AUTHORS     Fearon,K.L. and Dina,D.
TITLE       Immunomodulatory polynucleotides and methods of using the same
JOURNAL     Patent: WO 02052002-A 11 04-JUL-2002;
            Dynavax Technologies Corporation (US)
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Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Db 14 CGAACGTTTCG 5

RESULT 12
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LOCUS      AX592321      16 bp      DNA      linear      PAT 27-JAN-2003
DEFINITION Sequence 11 from Patent WO02052002.
ACCESSION  AX592321
VERSION     AX592321.1 GI:27950423
KEYWORDS    .
SOURCE      synthetic construct
ORGANISM    other sequences; artificial sequences.
REFERENCE   1
AUTHORS     Fearon,K.L. and Dina,D.
TITLE       Immunomodulatory polynucleotides and methods of using the same
JOURNAL     Patent: WO 02052002-A 11 04-JUL-2002;
            Dynavax Technologies Corporation (US)
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               /db_xref="taxon:32630"
               /note="Polynucleotide containing CG"

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Best Local Similarity 100.0%; Pred. No. 2.3e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
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Db 14 CGAACGTTTCG 5

RESULT 13
AX592324
LOCUS      AX592324      18 bp      DNA      linear      PAT 27-JAN-2003
DEFINITION Sequence 14 from Patent WO02052002.
ACCESSION  AX592324
VERSION     AX592324.1 GI:27950426
KEYWORDS    .
SOURCE      synthetic construct
ORGANISM    other sequences; artificial sequences.
REFERENCE   1
AUTHORS     Fearon,K.L. and Dina,D.
TITLE       Immunomodulatory polynucleotides and methods of using the same
JOURNAL     Patent: WO 02052002-A 14 04-JUL-2002;
            Dynavax Technologies Corporation (US)
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RESULT 14
AX592324/c
LOCUS      AX592324      18 bp      DNA      linear      PAT 27-JAN-2003
DEFINITION Sequence 14 from Patent WO02052002.
ACCESSION  AX592324
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VERSION AX592324.1 GI:27950426
KEYWORDS
SOURCE synthetic construct
ORGANISM synthetic construct
REFERENCE 1
AUTHORS Fearon,K.L. and Dina,D.
TITLE Immunomodulatory polynucleotides and methods of using the same
JOURNAL Patent: WO 02052002-A 14 04-JUL-2002;
Dynamax Technologies Corporation (US)
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/db_xref="taxon:32630"
/note="Polynucleotide containing CG"

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Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
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Db 13 CGAACGTTTCG 4

RESULT 15
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LOCUS AX592329 19 bp DNA linear PAT 27-JAN-2003
DEFINITION Sequence 19 from Patent WO02052002.
ACCESSION AX592329
VERSION AX592329.1 GI:27950431
KEYWORDS
SOURCE synthetic construct
ORGANISM synthetic construct
REFERENCE 1
AUTHORS Fearon,K.L. and Dina,D.
TITLE Immunomodulatory polynucleotides and methods of using the same
JOURNAL Patent: WO 02052002-A 19 04-JUL-2002;
Dynamax Technologies Corporation (US)
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/note="Polynucleotide containing CG"

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Best Local Similarity 100.0%; Pred. No. 2.4e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
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Db 5 CGAACGTTTCG 14

RESULT 16
AX592329/c
LOCUS AX592329 19 bp DNA linear PAT 27-JAN-2003
DEFINITION Sequence 19 from Patent WO02052002.
ACCESSION AX592329
VERSION AX592329.1 GI:27950431
KEYWORDS
SOURCE synthetic construct
ORGANISM synthetic construct
REFERENCE 1
AUTHORS Fearon,K.L. and Dina,D.
TITLE Immunomodulatory polynucleotides and methods of using the same
JOURNAL Patent: WO 02052002-A 19 04-JUL-2002;
Dynamax Technologies Corporation (US)
FEATURES source
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/note="Polynucleotide containing CG"

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Best Local Similarity 100.0%; Pred. No. 2.4e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
|||||
Db 5 CGAACGTTTCG 14

RESULT 17
AX296868
LOCUS AX296868 20 bp DNA linear PAT 21-NOV-2001
DEFINITION Sequence 8630 from Patent WO0179548.
ACCESSION AX296868
VERSION AX296868.1 GI:17058557
KEYWORDS
SOURCE synthetic construct
ORGANISM synthetic construct
REFERENCE 1
AUTHORS Barany,F., Zirvi,M., Gerry,N.P., Favis,R. and Kliman,R.
TITLE Method of designing addressable array for detection of nucleic acid
JOURNAL sequence differences using ligase detection reaction
Patent: WO 0179548-A 8630 25-OCT-2001;
CORNELL RESEARCH FOUNDATION, INC. (US)
FEATURES source
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Qy 1 CGAACGTTTCG 10
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Db 9 CGAACGTTTCG 18

RESULT 18
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LOCUS AX296868 20 bp DNA linear PAT 21-NOV-2001
DEFINITION Sequence 8630 from Patent WO0179548.
ACCESSION AX296868
VERSION AX296868.1 GI:17058557
KEYWORDS
SOURCE synthetic construct
ORGANISM synthetic construct
REFERENCE 1
AUTHORS Barany,F., Zirvi,M., Gerry,N.P., Favis,R. and Kliman,R.
TITLE Method of designing addressable array for detection of nucleic acid
JOURNAL sequence differences using ligase detection reaction
Patent: WO 0179548-A 8630 25-OCT-2001;
CORNELL RESEARCH FOUNDATION, INC. (US)
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Qy 1 CGAACGTTTCG 10
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Db 18 CGAACGTTTCG 9

RESULT 19

AX592442
LOCUS AX592442 21 bp DNA linear PAT 27-JAN-2003
DEFINITION Sequence 132 from Patent WO02052002.
ACCESSION AX592442
VERSION AX592442.1 GI:27950544

KEYWORDS synthetic construct
SOURCE other sequences; artificial sequences.
ORGANISM

REFERENCE 1

AUTHORS Fearon,K.L. and Dina,D.
TITLE Immunomodulatory polynucleotides and methods of using the same
JOURNAL Patent: WO 02052002-A 132 04-JUL-2002;
DynaVax Technologies Corporation (US)

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Best Local Similarity 100.0%; Pred. No. 2.4e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
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Db 5 CGAACGTTTCG 14

RESULT 20

AX592442/c
LOCUS AX592442 21 bp DNA linear PAT 27-JAN-2003
DEFINITION Sequence 132 from Patent WO02052002.
ACCESSION AX592442
VERSION AX592442.1 GI:27950544

KEYWORDS synthetic construct
SOURCE synthetic construct
ORGANISM other sequences; artificial sequences.

REFERENCE 1

AUTHORS Fearon,K.L. and Dina,D.
TITLE Immunomodulatory polynucleotides and methods of using the same
JOURNAL Patent: WO 02052002-A 132 04-JUL-2002;
DynaVax Technologies Corporation (US)

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Qy 1 CGAACGTTTCG 10
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Db 14 CGAACGTTTCG 5

RESULT 21

AR222419
LOCUS AR222419 22 bp DNA linear PAT 26-SEP-2002
DEFINITION Sequence 18 from patent US 6429292.
ACCESSION AR222419
VERSION AR222419.1 GI:23329932

KEYWORDS Unknown.
SOURCE Unknown.
ORGANISM Unclassified.

REFERENCE 1 (bases 1 to 22)
AUTHORS Jefferson,R.A., Wilson,K.J. and Leader,M.
TITLE Glucuronide repressors and uses thereof
JOURNAL Patent: US 6429292-A 18 06-AUG-2002;
FEATURES Location/Qualifiers
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Qy 1 CGAACGTTTCG 10
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Db 9 CGAACGTTTCG 18

RESULT 22

AR222419/c
LOCUS AR222419 22 bp DNA linear PAT 26-SEP-2002
DEFINITION Sequence 18 from patent US 6429292.
ACCESSION AR222419
VERSION AR222419.1 GI:23329932

KEYWORDS Unknown.
SOURCE Unknown.
ORGANISM Unclassified.

REFERENCE 1 (bases 1 to 22)
AUTHORS Jefferson,R.A., Wilson,K.J. and Leader,M.
TITLE Glucuronide repressors and uses thereof
JOURNAL Patent: US 6429292-A 18 06-AUG-2002;
FEATURES Location/Qualifiers
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Best Local Similarity 100.0%; Pred. No. 2.4e+04;
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Qy 1 CGAACGTTTCG 10
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RESULT 23

AR437285
LOCUS AR437285 22 bp DNA linear PAT 18-DEC-2003
DEFINITION Sequence 18 from patent US 6659764.
ACCESSION AR437285
VERSION AR437285.1 GI:40202187

KEYWORDS Unknown.
SOURCE Unknown.
ORGANISM Unclassified.

REFERENCE 1 (bases 1 to 22)
AUTHORS Xu,W.
TITLE Palm actuation lighter

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JOURNAL Patent: US 6659764-A 18 09-DEC-2003;
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Qy 1 CGAACGTTTCG 10
Db 9 CGAACGTTTCG 18

RESULT 24
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LOCUS AR437285 22 bp DNA linear PAT 18-DEC-2003
DEFINITION Sequence 18 from patent US 6659764.
ACCESSION AR437285
VERSION AR437285.1 GI:40202187
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE
1 (bases 1 to 22)
AUTHORS Xu, W.
TITLE Palm actuation lighter
JOURNAL Patent: US 6659764-A 18 09-DEC-2003;
FEATURES Location/Qualifiers
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ORIGIN
Query Match 100.0%; Score 10; DB 6; Length 22;
Best Local Similarity 100.0%; Pred. No. 2.4e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 18 CGAACGTTTCG 9

RESULT 25
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LOCUS AX592332 22 bp DNA linear PAT 27-JAN-2003
DEFINITION Sequence 22 from Patent WO02052002.
ACCESSION AX592332
VERSION AX592332.1 GI:27950434
KEYWORDS
SOURCE synthetic construct
synthetic construct
other sequences; artificial sequences.
REFERENCE
1
AUTHORS Fearon, K.L. and Dina, D.
TITLE Immunomodulatory polynucleotides and methods of using the same
JOURNAL Patent: WO 02052002-A 28 04-JUL-2002;
DynaVax Technologies Corporation (US)
LOCATION/Qualifiers
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Best Local Similarity 100.0%; Pred. No. 2.4e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 1 CGAACGTTTCG 10

RESULT 26
AX592332/c
LOCUS AX592332 22 bp DNA linear PAT 27-JAN-2003
DEFINITION Sequence 22 from Patent WO02052002.
ACCESSION AX592332
VERSION AX592332.1 GI:27950434
KEYWORDS
SOURCE synthetic construct
synthetic construct
other sequences; artificial sequences.
REFERENCE
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AUTHORS Fearon, K.L. and Dina, D.
TITLE Immunomodulatory polynucleotides and methods of using the same
JOURNAL Patent: WO 02052002-A 28 04-JUL-2002;
DynaVax Technologies Corporation (US)
LOCATION/Qualifiers
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ORIGIN
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Best Local Similarity 100.0%; Pred. No. 2.4e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 3 CGAACGTTTCG 12

RESULT 28
AX592338/c
LOCUS AX592338 22 bp DNA linear PAT 27-JAN-2003
DEFINITION Sequence 28 from Patent WO02052002.
ACCESSION AX592338

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VERSION AX592338.1 GI:27950440
SOURCE .
ORGANISM synthetic construct
          synthetic construct
          other sequences; artificial sequences.
REFERENCE 1
AUTHORS Fearon,K.L. and Dina,D.
TITLE Immunomodulatory polynucleotides and methods of using the same
JOURNAL Patent: WO 02052002-A 28 04-JUL-2002;
          Dynavax Technologies Corporation (US)
FEATURES source
          1. .22
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          /note="Polynucleotide containing CG"
ORIGIN
Query Match 100.0%; Score 10; DB 6; Length 22;
Best Local Similarity 100.0%; Pred. No. 2.4e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
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Db 12 CGAACGTTTCG 3

RESULT 29
AX592340
LOCUS AX592340 22 bp DNA linear PAT 27-JAN-2003
DEFINITION Sequence 30 from Patent WO02052002.
ACCESSION AX592340
VERSION AX592340.1 GI:27950442
KEYWORDS
SOURCE synthetic construct
          synthetic construct
          other sequences; artificial sequences.
REFERENCE 1
AUTHORS Fearon,K.L. and Dina,D.
TITLE Immunomodulatory polynucleotides and methods of using the same
JOURNAL Patent: WO 02052002-A 30 04-JUL-2002;
          Dynavax Technologies Corporation (US)
FEATURES source
          1. .22
          /organism="synthetic construct"
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          /db_xref="taxon:32630"
          /note="Polynucleotide containing CG"
ORIGIN
Query Match 100.0%; Score 10; DB 6; Length 22;
Best Local Similarity 100.0%; Pred. No. 2.4e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
   |||||
Db 8 CGAACGTTTCG 17

RESULT 30
AX592340/c
LOCUS AX592340 22 bp DNA linear PAT 27-JAN-2003
DEFINITION Sequence 30 from Patent WO02052002.
ACCESSION AX592340
VERSION AX592340.1 GI:27950442
KEYWORDS
SOURCE synthetic construct
          synthetic construct
          other sequences; artificial sequences.
REFERENCE 1
AUTHORS Fearon,K.L. and Dina,D.
TITLE Immunomodulatory polynucleotides and methods of using the same
JOURNAL Patent: WO 02052002-A 30 04-JUL-2002;
          Dynavax Technologies Corporation (US)
FEATURES source
          1. .22
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          /mol_type="unassigned DNA"
          /db_xref="taxon:32630"
          /note="Polynucleotide containing CG"
ORIGIN
Query Match 100.0%; Score 10; DB 6; Length 22;
Best Local Similarity 100.0%; Pred. No. 2.4e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
   |||||
Db 8 CGAACGTTTCG 17

RESULT 31
AX252517
LOCUS AX252517 24 bp DNA linear PAT 05-OCT-2001
DEFINITION Sequence 9 from Patent WO0168103.
ACCESSION AX252517
VERSION AX252517.1 GI:15985788
KEYWORDS
SOURCE synthetic construct
          synthetic construct
          other sequences; artificial sequences.
REFERENCE 1
AUTHORS van Nest,G.
TITLE Methods of ameliorating symptoms of herpes infection using
          immunomodulatory polynucleotide sequences
          Patent: WO 0168103-A 9 20-SEP-2001;
          Dynavax Technologies Corporation (US)
FEATURES source
          1. .24
          /organism="synthetic construct"
          /mol_type="unassigned DNA"
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Query Match 100.0%; Score 10; DB 6; Length 24;
Best Local Similarity 100.0%; Pred. No. 2.4e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
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Db 5 CGAACGTTTCG 14

RESULT 32
AX252517/c
LOCUS AX252517 24 bp DNA linear PAT 05-OCT-2001
DEFINITION Sequence 9 from Patent WO0168103.
ACCESSION AX252517
VERSION AX252517.1 GI:15985788
KEYWORDS
SOURCE synthetic construct
          synthetic construct
          other sequences; artificial sequences.
REFERENCE 1
AUTHORS van Nest,G.
TITLE Methods of ameliorating symptoms of herpes infection using
          immunomodulatory polynucleotide sequences
          Patent: WO 0168103-A 9 20-SEP-2001;
          Dynavax Technologies Corporation (US)
FEATURES source
          1. .24
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          /mol_type="unassigned DNA"
          /db_xref="taxon:32630"
          /note="Polynucleotide containing CG"

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ORIGIN
Query Match      100.0%; Score 10; DB 6; Length 24;
Best Local Similarity 100.0%; Pred. No. 2.4e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
Db 14 CGAACGTTTCG 5

RESULT 33
AX253133
LOCUS AX253133 24 bp DNA linear PAT 05-OCT-2001
DEFINITION Sequence 11 from Patent WO0168077.
ACCESSION AX253133
VERSION AX253133.1 GI:15986301
KEYWORDS synthetic construct
SOURCE synthetic construct
ORGANISM other sequences; artificial sequences.
REFERENCE 1
AUTHORS van Nest,G.
TITLE Methods of preventing and treating viral infections using
JOURNAL immunomodulatory polynucleotide sequences
Dynamax Technologies Corporation (US)
FEATURES
source 1..24
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="Polynucleotide containing CG"

ORIGIN
Query Match      100.0%; Score 10; DB 6; Length 24;
Best Local Similarity 100.0%; Pred. No. 2.4e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
Db 5 CGAACGTTTCG 14

RESULT 34
AX253133/c
LOCUS AX253133 24 bp DNA linear PAT 05-OCT-2001
DEFINITION Sequence 11 from Patent WO0168077.
ACCESSION AX253133
VERSION AX253133.1 GI:15986301
KEYWORDS synthetic construct
SOURCE synthetic construct
ORGANISM other sequences; artificial sequences.
REFERENCE 1
AUTHORS van Nest,G.
TITLE Methods of preventing and treating viral infections using
JOURNAL immunomodulatory polynucleotide sequences
Dynamax Technologies Corporation (US)
FEATURES
source 1..24
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="Polynucleotide containing CG"

ORIGIN
Query Match      100.0%; Score 10; DB 6; Length 24;
Best Local Similarity 100.0%; Pred. No. 2.4e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
Db 1 CGAACGTTTCG 10

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Db 14 CGAACGTTTCG 5

RESULT 35
AX292235
LOCUS AX292235 24 bp DNA linear PAT 21-NOV-2001
DEFINITION Sequence 3997 from Patent WO0179548.
ACCESSION AX292235
VERSION AX292235.1 GI:17053918
KEYWORDS synthetic construct
SOURCE synthetic construct
ORGANISM other sequences; artificial sequences.
REFERENCE 1
AUTHORS Barany,F., Zirvi,M., Gerry,N.P., Favis,R. and Kliman,R.
TITLE Method of designing addressable array for detection of nucleic acid
JOURNAL sequence differences using ligase detection reaction
Patent: WO 0179548-A 3997 25-OCT-2001;
CORNELL RESEARCH FOUNDATION, INC. (US)
FEATURES
source 1..24
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="Hypothetical Probe Sequence"

ORIGIN
Query Match      100.0%; Score 10; DB 6; Length 24;
Best Local Similarity 100.0%; Pred. No. 2.4e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
Db 9 CGAACGTTTCG 18

RESULT 36
AX292235/c
LOCUS AX292235 24 bp DNA linear PAT 21-NOV-2001
DEFINITION Sequence 3997 from Patent WO0179548.
ACCESSION AX292235
VERSION AX292235.1 GI:17053918
KEYWORDS synthetic construct
SOURCE synthetic construct
ORGANISM other sequences; artificial sequences.
REFERENCE 1
AUTHORS Barany,F., Zirvi,M., Gerry,N.P., Favis,R. and Kliman,R.
TITLE Method of designing addressable array for detection of nucleic acid
JOURNAL sequence differences using ligase detection reaction
Patent: WO 0179548-A 3997 25-OCT-2001;
CORNELL RESEARCH FOUNDATION, INC. (US)
FEATURES
source 1..24
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="Hypothetical Probe Sequence"

ORIGIN
Query Match      100.0%; Score 10; DB 6; Length 24;
Best Local Similarity 100.0%; Pred. No. 2.4e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
Db 18 CGAACGTTTCG 9

RESULT 37
AX592311
LOCUS AX592311 24 bp DNA linear PAT 27-JAN-2003

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DEFINITION Sequence 1 from Patent WO02052002.
ACCESSION AX592311
VERSION AX592311.1 GI:27950413
KEYWORDS synthetic construct
SOURCE synthetic construct
ORGANISM other sequences; artificial sequences.
REFERENCE 1
AUTHORS Fearon,K.L. and Dina,D.
TITLE Immunomodulatory polynucleotides and methods of using the same
JOURNAL Patent: WO 02052002-A 1 04-JUL-2002;
Dynamax Technologies Corporation (US)
LOCATION/Qualifiers
FEATURES source
1. .24
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="Polynucleotide containing CG"
ORIGIN
Query Match 100.0%; Score 10; DB 6; Length 24;
Best Local Similarity 100.0%; Pred. No. 2.4e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 CGAACGTTTCG 10
|||||
Db 5 CGAACGTTTCG 14
RESULT 38
AX592311/c
LOCUS AX592311 24 bp DNA linear PAT 27-JAN-2003
DEFINITION Sequence 1 from Patent WO02052002.
ACCESSION AX592311
VERSION AX592311.1 GI:27950413
KEYWORDS synthetic construct
SOURCE synthetic construct
ORGANISM other sequences; artificial sequences.
REFERENCE 1
AUTHORS Fearon,K.L. and Dina,D.
TITLE Immunomodulatory polynucleotides and methods of using the same
JOURNAL Patent: WO 02052002-A 1 04-JUL-2002;
Dynamax Technologies Corporation (US)
LOCATION/Qualifiers
FEATURES source
1. .24
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="Polynucleotide containing CG"
ORIGIN
Query Match 100.0%; Score 10; DB 6; Length 24;
Best Local Similarity 100.0%; Pred. No. 2.4e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 CGAACGTTTCG 10
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Db 5 CGAACGTTTCG 14
RESULT 39
AX592317
LOCUS AX592317 24 bp DNA linear PAT 27-JAN-2003
DEFINITION Sequence 7 from Patent WO02052002.
ACCESSION AX592317
VERSION AX592317.1 GI:27950419
KEYWORDS synthetic construct
SOURCE synthetic construct
ORGANISM other sequences; artificial sequences.
REFERENCE 1
AUTHORS Marahiel,M.A., Stachelhaus,T., Mootz,H. and Konz,D.
TITLE Nonribosomal peptide synthetase, process for producing the same and utilization thereof
JOURNAL Patent: JP 2002537806-A 25 12-NOV-2002;
MOHAMED A MARAHIEL,TORSTEN STACHELHAUS,HENNING MOOTZ,DIRK KONZ
OS Bacillus subtilis
PN JP 2002537806-A/25
PD 12-NOV-2002
PF 28-FEB-2000 JP 2000602764
DEFINITION Sequence 1 from Patent WO02052002.
ACCESSION AX592311
VERSION AX592311.1 GI:27950413
KEYWORDS synthetic construct
SOURCE synthetic construct
ORGANISM other sequences; artificial sequences.
REFERENCE 1
AUTHORS Fearon,K.L. and Dina,D.
TITLE Immunomodulatory polynucleotides and methods of using the same
JOURNAL Patent: WO 02052002-A 1 04-JUL-2002;
Dynamax Technologies Corporation (US)
LOCATION/Qualifiers
FEATURES source
1. .24
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="Polynucleotide containing CG"
ORIGIN
Query Match 100.0%; Score 10; DB 6; Length 24;
Best Local Similarity 100.0%; Pred. No. 2.4e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 CGAACGTTTCG 10
|||||
Db 14 CGAACGTTTCG 5
RESULT 40
AX592317/c
LOCUS AX592317 24 bp DNA linear PAT 27-JAN-2003
DEFINITION Sequence 7 from Patent WO02052002.
ACCESSION AX592317
VERSION AX592317.1 GI:27950419
KEYWORDS synthetic construct
SOURCE synthetic construct
ORGANISM other sequences; artificial sequences.
REFERENCE 1
AUTHORS Fearon,K.L. and Dina,D.
TITLE Immunomodulatory polynucleotides and methods of using the same
JOURNAL Patent: WO 02052002-A 7 04-JUL-2002;
Dynamax Technologies Corporation (US)
LOCATION/Qualifiers
FEATURES source
1. .24
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="Polynucleotide containing CG"
ORIGIN
Query Match 100.0%; Score 10; DB 6; Length 24;
Best Local Similarity 100.0%; Pred. No. 2.4e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 CGAACGTTTCG 10
|||||
Db 14 CGAACGTTTCG 5
RESULT 41
BD252019
LOCUS BD252019 27 bp DNA linear PAT 17-JUL-2003
DEFINITION Nonribosomal peptide synthetase, process for producing the same and utilization thereof.
ACCESSION BD252019
VERSION BD252019.1 GI:33061789
KEYWORDS JP 2002537806-A/25.
SOURCE Bacillus subtilis
ORGANISM Bacillus subtilis
REFERENCE 1 (bases 1 to 27)
AUTHORS Marahiel,M.A., Stachelhaus,T., Mootz,H. and Konz,D.
TITLE Nonribosomal peptide synthetase, process for producing the same and utilization thereof
JOURNAL Patent: JP 2002537806-A 25 12-NOV-2002;
MOHAMED A MARAHIEL,TORSTEN STACHELHAUS,HENNING MOOTZ,DIRK KONZ
OS Bacillus subtilis
PN JP 2002537806-A/25
PD 12-NOV-2002
PF 28-FEB-2000 JP 2000602764
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PR 03-MAR-1999 DE 199 09 146.3
PI MOHAMED A MARAHIEL,TORSTEN STACHELHAUS,HENNING MOOTZ,DIRK KONZ
PC C12N15/09,C07K14/00//C12N9/00,C12N15/00
CC Nonribosomal peptide synthetase, process for producing the CC
   same and
CC utilization thereof
FH Key Location/Qualifiers
FT source
   Location/Qualifiers
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   /organism="Bacillus subtilis"
   /organism="Bacillus subtilis"
   /mol_type="genomic DNA"
   /db_xref="taxon:1423"

FEATURES
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ORIGIN
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   Best Local Similarity 100.0%; Pred. No. 2.4e+04;
   Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAAGCTTCG 10
Db 10 CGAAGCTTCG 19

RESULT 42
BD252019/c
LOCUS
DEFINITION Nonribosomal peptide synthetase, process for producing the same and
utilization thereof.
ACCESSION BD252019
VERSION BD252019.1 GI:33061789
KEYWORDS JP 2002537806-A/25.
SOURCE Bacillus subtilis
ORGANISM Bacillus subtilis
Bacteria; Firmicutes; Bacillales; Bacillaceae; Bacillus.
REFERENCE 1 (bases 1 to 27)
AUTHORS Marahiel,M.A., Stachelhaus,T., Mootz,H. and Konz,D.
TITLE Nonribosomal peptide synthetase, process for producing the same and
utilization thereof
JOURNAL Patent: JP 2002537806-A 25 12-NOV-2002;
COMMENT MOHAMED A MARAHIEL,TORSTEN STACHELHAUS,HENNING MOOTZ,DIRK KONZ
OS Bacillus subtilis
PN JP 2002537806-A/25
PD 12-NOV-2002
PF 28-FEB-2000 JP 2000602764
PR 03-MAR-1999 DE 199 09 146.3
PI MOHAMED A MARAHIEL,TORSTEN STACHELHAUS,HENNING MOOTZ,DIRK KONZ
PC C12N15/09,C07K14/00//C12N9/00,C12N15/00
CC Nonribosomal peptide synthetase, process for producing the CC
   same and
CC utilization thereof
FH Key Location/Qualifiers
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   /organism="Bacillus subtilis"
   /mol_type="genomic DNA"
   /db_xref="taxon:1423"

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   Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAAGCTTCG 10
Db 19 CGAAGCTTCG 10

RESULT 43
AX035610
LOCUS
DEFINITION Sequence 25 from Patent WO0052152.
ACCESSION AX035610
VERSION AX035610.1 GI:11191205
KEYWORDS
SOURCE
ORGANISM
Bacteria; Firmicutes; Bacillales; Bacillaceae; Bacillus.
REFERENCE 1
AUTHORS Stachelhaus,T., Konz,D., Mootz,H. and Marahiel,M.A.
TITLE Non-ribosomal peptide synthetases, method for producing same and
the use thereof
JOURNAL Patent: WO 0052152-A 25 08-SEP-2000;
MARAHIEL MOHAMED A (DE)
MARAHIEL MOHAMED A (DE)
FEATURES
   source
ORIGIN
   Query Match 100.0%; Score 10; DB 6; Length 27;
   Best Local Similarity 100.0%; Pred. No. 2.4e+04;
   Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAAGCTTCG 10
Db 10 CGAAGCTTCG 19

RESULT 44
AX035610/c
LOCUS
DEFINITION Sequence 25 from Patent WO0052152.
ACCESSION AX035610
VERSION AX035610.1 GI:11191205
KEYWORDS
SOURCE
ORGANISM
Bacteria; Firmicutes; Bacillales; Bacillaceae; Bacillus.
REFERENCE 1
AUTHORS Stachelhaus,T., Konz,D., Mootz,H. and Marahiel,M.A.
TITLE Non-ribosomal peptide synthetases, method for producing same and
the use thereof
JOURNAL Patent: WO 0052152-A 25 08-SEP-2000;
STACHELHAUS TORSTEN (DE) ; KONZ DIRK (DE) ; MOOTZ HENNING (DE) ;
MARAHIEL MOHAMED A (DE)
FEATURES
   source
ORIGIN
   Query Match 100.0%; Score 10; DB 6; Length 27;
   Best Local Similarity 100.0%; Pred. No. 2.4e+04;
   Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAAGCTTCG 10
Db 19 CGAAGCTTCG 10

RESULT 45
E40906
LOCUS
DEFINITION Humanized anti-Pas antibody.
ACCESSION E40906
VERSION E40906.1 GI:18627483
KEYWORDS JP 2000166574-A/95.
SOURCE synthetic construct
ORGANISM synthetic construct

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LOCUS
DEFINITION Sequence 25 from Patent WO0052152.
ACCESSION AX035610
VERSION AX035610.1 GI:11191205
KEYWORDS
SOURCE
ORGANISM
Bacteria; Firmicutes; Bacillales; Bacillaceae; Bacillus.
REFERENCE 1
AUTHORS Stachelhaus,T., Konz,D., Mootz,H. and Marahiel,M.A.
TITLE Non-ribosomal peptide synthetases, method for producing same and
the use thereof
JOURNAL Patent: WO 0052152-A 25 08-SEP-2000;
STACHELHAUS TORSTEN (DE) ; KONZ DIRK (DE) ; MOOTZ HENNING (DE) ;
MARAHIEL MOHAMED A (DE)
FEATURES
   source
ORIGIN
   Query Match 100.0%; Score 10; DB 6; Length 27;
   Best Local Similarity 100.0%; Pred. No. 2.4e+04;
   Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAAGCTTCG 10
Db 10 CGAAGCTTCG 19

RESULT 44
AX035610/c
LOCUS
DEFINITION Sequence 25 from Patent WO0052152.
ACCESSION AX035610
VERSION AX035610.1 GI:11191205
KEYWORDS
SOURCE
ORGANISM
Bacteria; Firmicutes; Bacillales; Bacillaceae; Bacillus.
REFERENCE 1
AUTHORS Stachelhaus,T., Konz,D., Mootz,H. and Marahiel,M.A.
TITLE Non-ribosomal peptide synthetases, method for producing same and
the use thereof
JOURNAL Patent: WO 0052152-A 25 08-SEP-2000;
STACHELHAUS TORSTEN (DE) ; KONZ DIRK (DE) ; MOOTZ HENNING (DE) ;
MARAHIEL MOHAMED A (DE)
FEATURES
   source
ORIGIN
   Query Match 100.0%; Score 10; DB 6; Length 27;
   Best Local Similarity 100.0%; Pred. No. 2.4e+04;
   Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAAGCTTCG 10
Db 19 CGAAGCTTCG 10

RESULT 45
E40906
LOCUS
DEFINITION Humanized anti-Pas antibody.
ACCESSION E40906
VERSION E40906.1 GI:18627483
KEYWORDS JP 2000166574-A/95.
SOURCE synthetic construct
ORGANISM synthetic construct

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other sequences; artificial sequences.
REFERENCE
1 (bases 1 to 44)
AUTHORS
Serizawa,N., Haruyama,H., Nakahara,K. and Tamaki,I.
TITLE
Humanized anti-Fas antibody
JOURNAL
Patent: JP 2000166574-A 95 20-JUN-2000;
SANKYO CO LTD
COMMENT
OS Artificial Sequence
PN JP 2000166574-A/95
PD 20-JUN-2000
PF 29-SEP-1999 JP 1999275441
PR
PI NOBUKI SERIZAWA,HIDEYUKI HARUYAMA,KAORI NAKAHARA,IKUKO TAMAKI
PC C12N15/09,A61K39/00,A61K39/395,A61K39/395,A61P37/02,A61P43/00,
PC C07K16/18
PC C12N1/21,C12N5/10,C12P21/08/(C12N1/21,C12R1:19),C12N15/00, PC
C12N5/00
CC
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FT /organism='Artificial Sequence'.
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Location/Qualifiers
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/organism='synthetic construct'
/mol_type='genomic DNA'
/db_xref='taxon:32630'
ORIGIN
Query Match 100.0%; Score 10; DB 6; Length 44;
Best Local Similarity 100.0%; Pred. No. 2.4e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 CGAACGTTTCG 10
Db |||||||
6 CGAACGTTTCG 15
RESULT 46
E40906/c
LOCUS
E40906 Humanized anti-Fas antibody. 44 bp DNA linear PAT 31-JAN-2002
DEFINITION
E40906
ACCESSION
E40906.1 GI:18627483
VERSION
JP 2000166574-A/95.
KEYWORDS
synthetic construct
SOURCE
synthetic construct
other sequences; artificial sequences.
REFERENCE
1 (bases 1 to 44)
AUTHORS
Serizawa,N., Haruyama,H., Nakahara,K. and Tamaki,I.
TITLE
Humanized anti-Fas antibody
JOURNAL
Patent: JP 2000166574-A 95 20-JUN-2000;
SANKYO CO LTD
COMMENT
OS Artificial Sequence
PN JP 2000166574-A/95
PD 20-JUN-2000
PF 29-SEP-1999 JP 1999275441
PR
PI NOBUKI SERIZAWA,HIDEYUKI HARUYAMA,KAORI NAKAHARA,IKUKO TAMAKI
PC C12N15/09,A61K39/00,A61K39/395,A61K39/395,A61P37/02,A61P43/00,
PC C07K16/18,
PC C12N1/21,C12N5/10,C12P21/08/(C12N1/21,C12R1:19),C12N15/00, PC
C12N5/00
CC
FH Key Location/Qualifiers
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FT /organism='Artificial Sequence'.
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/mol_type='genomic DNA'
/db_xref='taxon:32630'
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Query Match 100.0%; Score 10; DB 6; Length 44;

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Best Local Similarity 100.0%; Pred. No. 2.4e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 CGAACGTTTCG 10
Db |||||||
15 CGAACGTTTCG 6
RESULT 47
E40907
LOCUS
E40907 Humanized anti-Fas antibody. 44 bp DNA linear PAT 31-JAN-2002
DEFINITION
E40907
ACCESSION
E40907.1 GI:18627484
VERSION
JP 2000166574-A/96.
KEYWORDS
synthetic construct
SOURCE
synthetic construct
other sequences; artificial sequences.
REFERENCE
1 (bases 1 to 44)
AUTHORS
Serizawa,N., Haruyama,H., Nakahara,K. and Tamaki,I.
TITLE
Humanized anti-Fas antibody
JOURNAL
Patent: JP 2000166574-A 96 20-JUN-2000;
SANKYO CO LTD
COMMENT
OS Artificial Sequence
PN JP 2000166574-A/96
PD 20-JUN-2000
PF 29-SEP-1999 JP 1999275441
PR
PI NOBUKI SERIZAWA,HIDEYUKI HARUYAMA,KAORI NAKAHARA,IKUKO TAMAKI
PC C12N15/09,A61K39/00,A61K39/395,A61K39/395,A61P37/02,A61P43/00,
PC C07K16/18,
PC C12N1/21,C12N5/10,C12P21/08/(C12N1/21,C12R1:19),C12N15/00, PC
C12N5/00
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FT /organism='Artificial Sequence'.
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source
Location/Qualifiers
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/mol_type='genomic DNA'
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Best Local Similarity 100.0%; Pred. No. 2.4e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 CGAACGTTTCG 10
Db |||||||
30 CGAACGTTTCG 39
RESULT 48
E40907/c
LOCUS
E40907/c Humanized anti-Fas antibody. 44 bp DNA linear PAT 31-JAN-2002
DEFINITION
E40907
ACCESSION
E40907.1 GI:18627484
VERSION
JP 2000166574-A/96.
KEYWORDS
synthetic construct
SOURCE
synthetic construct
other sequences; artificial sequences.
REFERENCE
1 (bases 1 to 44)
AUTHORS
Serizawa,N., Haruyama,H., Nakahara,K. and Tamaki,I.
TITLE
Humanized anti-Fas antibody
JOURNAL
Patent: JP 2000166574-A 96 20-JUN-2000;
SANKYO CO LTD
COMMENT
OS Artificial Sequence
PN JP 2000166574-A/96
PD 20-JUN-2000
PF 29-SEP-1999 JP 1999275441
PR

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PI NOBUKI SERIZAWA, HIDEYUKI HARUYAMA, KAORI NAKAHARA, IKUKO TAMAKI
 PC C12N15/09, A61K39/00, A61K39/395, A61P37/02, A61P43/00,
 PC C07K16/18,
 PC C12N1/21, C12N5/10, C12P21/08// (C12N1/21, C12R1/19), C12N15/00, PC
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 FT Location/Qualifiers
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FEATURES

source

ORIGIN

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 Best Local Similarity 100.0%; Pred. No. 2.4e+04;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Oy 1 CGAACGTTTCG 10
 Db 39 CGAACGTTTCG 30

RESULT 49
 BD090635
 LOCUS
 DEFINITION Drug containing humanized anti-Fas antibody.
 ACCESSION BD090635
 VERSION BD090635.1 GI:22636245
 KEYWORDS JP 2001342148-A/95.
 SOURCE synthetic construct
 ORGANISM other sequences; artificial sequences.
 REFERENCE 1 (bases 1 to 44)
 AUTHORS Serizawa, N., Haruyama, H., Nakahara, K. and Tamaki, I.
 TITLE Drug containing humanized anti-Fas antibody
 JOURNAL Patent: JP 2001342148-A 95 11-DEC-2001;
 SANKYO CO LTD
 COMMENT OS Artificial Sequence
 PN JP 2001342148-A/95
 PD 11-DEC-2001
 PF 28-MAR-2001 JP 2001093106
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 A61P13/12,
 PC A61P19/02, A61P29/00, A61P37/00, A61P37/06, A61P37/08, A61P43/00//
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 PC A61K37/02, C12N15/00
 CC Description of Artificial Sequence: PCR primer to amplify a
 CC fragment of
 CC DNA encoding the light chain of a humanized anti-Fas antibody
 FH Key Location/Qualifiers
 FT source 1..44
 FT /organism='Artificial Sequence'.

FEATURES

source

ORIGIN

Query Match 100.0%; Score 10; DB 6; Length 44;
 Best Local Similarity 100.0%; Pred. No. 2.4e+04;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Oy 1 CGAACGTTTCG 10
 Db 39 CGAACGTTTCG 30

RESULT 51
 BD090636
 LOCUS
 DEFINITION Drug containing humanized anti-Fas antibody.
 ACCESSION BD090636
 VERSION BD090636.1 GI:22636246
 KEYWORDS JP 2001342148-A/96.
 SOURCE synthetic construct
 ORGANISM other sequences; artificial sequences.
 REFERENCE 1 (bases 1 to 44)
 AUTHORS Serizawa, N., Haruyama, H., Nakahara, K. and Tamaki, I.
 TITLE Drug containing humanized anti-Fas antibody
 JOURNAL Patent: JP 2001342148-A 96 11-DEC-2001;
 SANKYO CO LTD
 COMMENT OS Artificial Sequence
 PN JP 2001342148-A/96
 PD 11-DEC-2001
 PF 28-MAR-2001 JP 2001093106
 PI NOBUFUSA SERIZAWA, HIDEYUKI HARUYAMA, KAORI NAKAHARA, IKUKO
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 A61P13/12,
 PC A61P19/02, A61P29/00, A61P37/00, A61P37/06, A61P37/08, A61P43/00//
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 PC A61K37/02, C12N15/00
 CC Description of Artificial Sequence: PCR primer to amplify a
 CC fragment of
 CC DNA encoding the light chain of a humanized anti-Fas antibody
 FH Key Location/Qualifiers
 FT source 1..44
 FT /organism='Artificial Sequence'.

FEATURES

source

ORIGIN

Query Match 100.0%; Score 10; DB 6; Length 44;
 Best Local Similarity 100.0%; Pred. No. 2.4e+04;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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 Db 6 CGAACGTTTCG 15

RESULT 50

BD090635/c

LOCUS

DEFINITION

ACCESSION

VERSION

KEYWORDS

SOURCE

ORGANISM

REFERENCE

AUTHORS

TITLE

JOURNAL

COMMENT

OS Artificial Sequence

PN JP 2001342148-A/95

PD 11-DEC-2001

PF 28-MAR-2001 JP 2001093106

PI NOBUFUSA SERIZAWA, HIDEYUKI HARUYAMA, KAORI NAKAHARA, IKUKO
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 PC A61K39/395, A61K38/00, A61P1/16, A61P7/06, A61P9/00, A61P9/10, PC
 A61P13/12,
 PC A61P19/02, A61P29/00, A61P37/00, A61P37/06, A61P37/08, A61P43/00//
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 PC A61K37/02, C12N15/00
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 CC fragment of
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 FT /organism='Artificial Sequence'.

source

Query Match

Best Local Similarity

Matches

Oy

Db

1 CGAACGTTTCG 10

15 CGAACGTTTCG 6

RESULT 51

BD090636

LOCUS

DEFINITION

ACCESSION

VERSION

KEYWORDS

SOURCE

ORGANISM

REFERENCE

AUTHORS

TITLE

JOURNAL

COMMENT

OS Artificial Sequence

PN JP 2001342148-A/95

PD 11-DEC-2001

PF 28-MAR-2001 JP 2001093106

PI NOBUFUSA SERIZAWA, HIDEYUKI HARUYAMA, KAORI NAKAHARA, IKUKO
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 PC A61K39/395, A61K38/00, A61P1/16, A61P7/06, A61P9/00, A61P9/10, PC
 A61P13/12,
 PC A61P19/02, A61P29/00, A61P37/00, A61P37/06, A61P37/08, A61P43/00//
 PC C12N15/09,
 PC A61K37/02, C12N15/00
 CC Description of Artificial Sequence: PCR primer to amplify a
 CC fragment of
 CC DNA encoding the light chain of a humanized anti-Fas antibody
 FH Key Location/Qualifiers
 FT source 1..44
 FT /organism='Artificial Sequence'.

source

Query Match

Best Local Similarity

Matches

Oy

Db

1 CGAACGTTTCG 10

15 CGAACGTTTCG 6

RESULT 51

BD090636

LOCUS

DEFINITION

ACCESSION

VERSION

KEYWORDS

SOURCE

ORGANISM

REFERENCE

AUTHORS

TITLE

JOURNAL

COMMENT

OS Artificial Sequence

PN JP 2001342148-A/96

PD 11-DEC-2001

PF 28-MAR-2001 JP 2001093106

PI NOBUFUSA SERIZAWA, HIDEYUKI HARUYAMA, KAORI NAKAHARA, IKUKO
 TAMAKI
 PC A61K39/395, A61K38/00, A61P1/16, A61P7/06, A61P9/00, A61P9/10, PC
 A61P13/12,
 PC A61P19/02, A61P29/00, A61P37/00, A61P37/06, A61P37/08, A61P43/00//
 PC C12N15/09,
 PC A61K37/02, C12N15/00
 CC Description of Artificial Sequence: PCR primer to amplify a
 CC fragment of
 CC DNA encoding the light chain of a humanized anti-Fas antibody
 FH Key Location/Qualifiers
 FT source 1..44
 FT /organism='Artificial Sequence'.

source

Query Match

Best Local Similarity

Matches

Oy

Db

1 CGAACGTTTCG 10

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PC A61K37/02,C12N15/00
CC Description of Artificial Sequence: PCR primer to amplify a
CC fragment of
CC DNA encoding the light chain of a humanized anti-Fas antibody
FH Key
FT source
1. .44
Location/Qualifiers
/organism='Artificial Sequence'.
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/organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"
ORIGIN
Query Match 100.0%; Score 10; DB 6; Length 44;
Best Local Similarity 100.0%; Pred. No. 2.4e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 CGAACGTTTCG 10
|||||
Db 30 CGAACGTTTCG 39
RESULT 52
BD090636/c
LOCUS BD090636 44 bp DNA linear PAT 27-AUG-2002
DEFINITION Drug containing humanized anti-Fas antibody.
ACCESSION BD090636
VERSION BD090636.1 GI:22636246
KEYWORDS JP 2001342148-A/96.
SOURCE synthetic construct
ORGANISM other sequences; artificial sequences.
REFERENCE 1 (bases 1 to 44)
AUTHORS Serizawa,N., Haruyama,H., Nakahara,K. and Tamaki,I.
TITLE Drug containing humanized anti-Fas antibody
JOURNAL Patent: JP 2001342148-A 96 11-DEC-2001;
SANKYO CO LTD
OS Artificial Sequence
FN JP 2001342148-A/96
PD 11-DEC-2001
PF 28-MAR-2001 JP 2001093106
PI NOBUFUSA SERIZAWA,HIDEYUKI HARUYAMA,KAORI NAKAHARA,IKUKO PI
TAMAKI
PC A61K39/395,A61K38/00,A61P1/16,A61P"/06,A61P9/00,A61P9/10, PC
A61P13/12,
PC A61P19/02,A61P29/00,A61P37/00,A61P37/06,A61P37/08,A61P43/00//
PC C12N15/09,
PC A61K37/02,C12N15/00
CC Description of Artificial Sequence: PCR primer to amplify a
CC fragment of
CC DNA encoding the light chain of a humanized anti-Fas antibody
FH Key
FT source
1. .44
Location/Qualifiers
/organism='Artificial Sequence'.
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/db_xref="taxon:32630"
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Best Local Similarity 100.0%; Pred. No. 2.4e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 CGAACGTTTCG 10
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Db 39 CGAACGTTTCG 30
RESULT 53
AR222417
LOCUS AR222417 48 bp DNA linear PAT 18-DEC-2003
DEFINITION Sequence 16 from patent US 6429292.
ACCESSION AR222417
VERSION AR222417.1 GI:23329930
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 48)
AUTHORS Jefferson,R.A., Wilson,K.J. and Leader,M.
TITLE Glucuronide repressors and uses thereof
JOURNAL Patent: US 6429292-A 16 06-AUG-2002;
FEATURES Location/Qualifiers
source 1. .48
/organism="unknown"
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Query Match 100.0%; Score 10; DB 6; Length 48;
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Qy 1 CGAACGTTTCG 10
|||||
Db 25 CGAACGTTTCG 34
RESULT 54
AR222417/c
LOCUS AR222417 48 bp DNA linear PAT 26-SEP-2002
DEFINITION Sequence 16 from patent US 6429292.
ACCESSION AR222417
VERSION AR222417.1 GI:23329930
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 48)
AUTHORS Jefferson,R.A., Wilson,K.J. and Leader,M.
TITLE Glucuronide repressors and uses thereof
JOURNAL Patent: US 6429292-A 16 06-AUG-2002;
FEATURES Location/Qualifiers
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/mol_type="genomic DNA"
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Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 CGAACGTTTCG 10
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Db 34 CGAACGTTTCG 25
RESULT 55
AR437283
LOCUS AR437283 48 bp DNA linear PAT 18-DEC-2003
DEFINITION Sequence 16 from patent US 6659764.
ACCESSION AR437283
VERSION AR437283.1 GI:40202185
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 48)
AUTHORS Xu,W.
TITLE Palm actuation lighter
JOURNAL Patent: US 6659764-A 16 09-DEC-2003;
FEATURES Location/Qualifiers
source 1. .48
/organism="unknown"

LOCUS AR222417 48 bp DNA linear PAT 26-SEP-2002
DEFINITION Sequence 16 from patent US 6429292.
ACCESSION AR222417
VERSION AR222417.1 GI:23329930
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 48)
AUTHORS Jefferson,R.A., Wilson,K.J. and Leader,M.
TITLE Glucuronide repressors and uses thereof
JOURNAL Patent: US 6429292-A 16 06-AUG-2002;
FEATURES Location/Qualifiers
source 1. .48
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Query Match 100.0%; Score 10; DB 6; Length 48;
Best Local Similarity 100.0%; Pred. No. 2.4e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 CGAACGTTTCG 10
|||||
Db 25 CGAACGTTTCG 34
RESULT 54
AR222417/c
LOCUS AR222417 48 bp DNA linear PAT 26-SEP-2002
DEFINITION Sequence 16 from patent US 6429292.
ACCESSION AR222417
VERSION AR222417.1 GI:23329930
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 48)
AUTHORS Jefferson,R.A., Wilson,K.J. and Leader,M.
TITLE Glucuronide repressors and uses thereof
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Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 CGAACGTTTCG 10
|||||
Db 34 CGAACGTTTCG 25
RESULT 55
AR437283
LOCUS AR437283 48 bp DNA linear PAT 18-DEC-2003
DEFINITION Sequence 16 from patent US 6659764.
ACCESSION AR437283
VERSION AR437283.1 GI:40202185
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 48)
AUTHORS Xu,W.
TITLE Palm actuation lighter
JOURNAL Patent: US 6659764-A 16 09-DEC-2003;
FEATURES Location/Qualifiers
source 1. .48
/organism="unknown"

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Best Local Similarity 100.0%; Pred. No. 2.4e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
    |||||
Db 25 CGAACGTTTCG 34

RESULT 56
AR437283/c
LOCUS      AR437283      48 bp      DNA      linear      PAT 18-DEC-2003
DEFINITION Sequence 16 from patent US 6659764.
ACCESSION  AR437283
VERSION     AR437283.1 GI:40202185
KEYWORDS
SOURCE      Unknown.
ORGANISM    Unknown.
REFERENCE   1 (bases 1 to 48)
AUTHORS     Xu W.
TITLE       Palm actuation lighter
JOURNAL     Patent: US 6659764-A 16 09-DEC-2003;
FEATURES    Location/Qualifiers
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            /organism="unknown"
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Best Local Similarity 100.0%; Pred. No. 2.4e+04;
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Qy 1 CGAACGTTTCG 10
    |||||
Db 34 CGAACGTTTCG 25

RESULT 57
CQ007200
LOCUS      CQ007200      51 bp      DNA      linear      PAT 16-JAN-2004
DEFINITION Sequence 5840 from Patent WO0147944.
ACCESSION  CQ007200
VERSION     CQ007200.1 GI:41013832
KEYWORDS    Homo sapiens (human)
SOURCE      Homo sapiens
ORGANISM    Homo sapiens
REFERENCE   1
AUTHORS     Shimkets,R.A. and Leach,M.
TITLE       Nucleic acids containing single nucleotide polymorphisms and
            methods of use thereof
JOURNAL     Patent: WO 0147944-A 5840 05-JUL-2001;
            Curagen Corporation (US)
FEATURES    Location/Qualifiers
            source
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            /db_xref="taxon:9606"
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Qy 1 CGAACGTTTCG 10
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Db 19 CGAACGTTTCG 28

RESULT 58
CQ007200/c
LOCUS      CQ007200      51 bp      DNA      linear      PAT 16-JAN-2004
DEFINITION Sequence 5840 from Patent WO0147944.
ACCESSION  CQ007200
VERSION     CQ007200.1 GI:41013832
KEYWORDS    Homo sapiens (human)
SOURCE      Homo sapiens
ORGANISM    Homo sapiens
REFERENCE   1
AUTHORS     Shimkets,R.A. and Leach,M.
TITLE       Nucleic acids containing single nucleotide polymorphisms and
            methods of use thereof
JOURNAL     Patent: WO 0147944-A 5840 05-JUL-2001;
            Curagen Corporation (US)
FEATURES    Location/Qualifiers
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Qy 1 CGAACGTTTCG 10
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Db 28 CGAACGTTTCG 19

RESULT 59
A44231
LOCUS      A44231      71 bp      DNA      linear      PAT 07-MAR-1997
DEFINITION Sequence 12 from Patent WO9510618.
ACCESSION  A44231
VERSION     A44231.1 GI:22999087
KEYWORDS    unidentified
SOURCE      unidentified
ORGANISM    unidentified
REFERENCE   1 (bases 1 to 71)
AUTHORS     Yu,S., Bojsen,K., Kragh,K.M., Bojko,M., Nielsen,J. and Marcussen,J.
TITLE       USE OF -g(a)-1,4-GLUCAN LYASE FOR PREPARATION OF
            1,5-D-ANHYDROFRUCTOSE ALPHA-1,4-GLUCAN LYASE FROM A FUNGUS INFECTED
            ALGAE, ITS PURIFICATION, GENE CLONING AND EXPRESSION IN
            MICROORGANISMS
JOURNAL     Patent: WO 9510618-A 12 20-APR-1995;
            DANISCO (DK)
COMMENT     Other publication GB 2297090 960724
            Other publication CA 2174115 950420
            Other publication GB 2296717 960710
            Other publication AU 7937994 950504
            Other publication AU 7856394 950504.
FEATURES    Location/Qualifiers
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            /db_xref="taxon:32644"

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Best Local Similarity 100.0%; Pred. No. 2.5e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
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Db 17 CGAACGTTTCG 26
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RESULT 60
A44231/c
LOCUS       A44231
DEFINITION  Sequence 12 from Patent WO9510618.
ACCESSION  A44231
VERSION     A44231.1 GI:2299087
KEYWORDS   .
SOURCE     .
ORGANISM   unidentified
            unclassified.
REFERENCE   1 (bases 1 to 71)
AUTHORS    Yu, S., Bojsen, K., Kragh, K.M., Bojko, M., Nielsen, J. and Marcussen, J.
TITLE      USE OF -g(a)-1,4-GLUCAN LYASE FOR PREPARATION OF
            1,5-D-ANHYDROFRUCTOSE
JOURNAL    Patent: WO 9510618-A 12 20-APR-1995;
            DANISCO (DK); YU SHUKUN (SE)
FEATURES   Location/Qualifiers
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Best Local Similarity 100.0%; Pred. No. 2.5e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
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Db 26 CGAACGTTTCG 17

RESULT 61
A72728
LOCUS       A72728
DEFINITION  Sequence 22 from Patent WO9510616.
ACCESSION  A72728
VERSION     A72728.1 GI:6063802
KEYWORDS   .
SOURCE     .
ORGANISM   unidentified
            unclassified.
REFERENCE   1 (bases 1 to 71)
AUTHORS    Yu, S. and Bojsen, K.
TITLE      USE OF ALPHA -1,4-GLUCAN LYASE FOR PREPARATION OF
            1,5-D-ANHYDROFRUCTOSE
JOURNAL    Patent: WO 9510616-A 22 20-APR-1995;
            DANISCO (DK); YU SHUKUN (SE)
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Best Local Similarity 100.0%; Pred. No. 2.5e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
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Db 26 CGAACGTTTCG 17

RESULT 62
A72728/c
LOCUS       A72728/c
DEFINITION  Sequence 22 from Patent WO9510616.
ACCESSION  A72728
VERSION     A72728.1 GI:6063802
KEYWORDS   .
SOURCE     .
ORGANISM   unidentified
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REFERENCE   1 (bases 1 to 71)
AUTHORS    Yu, S. and Bojsen, K.
TITLE      USE OF ALPHA -1,4-GLUCAN LYASE FOR PREPARATION OF
            1,5-D-ANHYDROFRUCTOSE
JOURNAL    Patent: WO 9510616-A 22 20-APR-1995;
            DANISCO (DK); YU SHUKUN (SE)
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            /mol_type="unassigned DNA"
            /db_xref="taxon:32644"
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Query Match      100.0%; Score 10; DB 6; Length 71;
Best Local Similarity 100.0%; Pred. No. 2.5e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
    |||||
Db 26 CGAACGTTTCG 17

RESULT 63
AR408862
LOCUS       AR408862
DEFINITION  Sequence 22 from patent US 6632643.
ACCESSION  AR408862
VERSION     AR408862.1 GI:40159263
KEYWORDS   .
SOURCE     .
ORGANISM   Unknown.
            Unclassified.
REFERENCE   1 (bases 1 to 71)
AUTHORS    Yu, S., Bojsen, K., Kragh, K., Bojko, M., Nielsen, J., Marcussen, J. and
            Christensen, I.
TITLE      Use of .alpha.-1,4-glucan lyase for preparation of
            1,5-D-hydrofructose
JOURNAL    Patent: US 6632643-A 22 14-OCT-2003;
            Location/Qualifiers
            source
            1..71
            /organism="unknown"
            /mol_type="mrna"
ORIGIN
Query Match      100.0%; Score 10; DB 6; Length 71;
Best Local Similarity 100.0%; Pred. No. 2.5e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
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Db 17 CGAACGTTTCG 26

RESULT 64
AR408862/c
LOCUS       AR408862/c
DEFINITION  Sequence 22 from patent US 6632643.
ACCESSION  AR408862
VERSION     AR408862.1 GI:40159263
KEYWORDS   .
SOURCE     .
ORGANISM   Unknown.
            Unclassified.

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RESULT 62
A72728/c
LOCUS       A72728/c
DEFINITION  Sequence 22 from Patent WO9510616.
ACCESSION  A72728
VERSION     A72728.1 GI:6063802
KEYWORDS   .
SOURCE     .
ORGANISM   unidentified
            unclassified.
REFERENCE   1 (bases 1 to 71)
AUTHORS    Yu, S. and Bojsen, K.
TITLE      USE OF ALPHA -1,4-GLUCAN LYASE FOR PREPARATION OF
            1,5-D-ANHYDROFRUCTOSE
JOURNAL    Patent: WO 9510616-A 22 20-APR-1995;
            DANISCO (DK); YU SHUKUN (SE)
FEATURES   Location/Qualifiers
            source
            1..71
            /organism="unidentified"
            /mol_type="unassigned DNA"
            /db_xref="taxon:32644"
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Query Match      100.0%; Score 10; DB 6; Length 71;
Best Local Similarity 100.0%; Pred. No. 2.5e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
    |||||
Db 26 CGAACGTTTCG 17

RESULT 63
AR408862
LOCUS       AR408862
DEFINITION  Sequence 22 from patent US 6632643.
ACCESSION  AR408862
VERSION     AR408862.1 GI:40159263
KEYWORDS   .
SOURCE     .
ORGANISM   Unknown.
            Unclassified.
REFERENCE   1 (bases 1 to 71)
AUTHORS    Yu, S., Bojsen, K., Kragh, K., Bojko, M., Nielsen, J., Marcussen, J. and
            Christensen, I.
TITLE      Use of .alpha.-1,4-glucan lyase for preparation of
            1,5-D-hydrofructose
JOURNAL    Patent: US 6632643-A 22 14-OCT-2003;
            Location/Qualifiers
            source
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            /organism="unknown"
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Query Match      100.0%; Score 10; DB 6; Length 71;
Best Local Similarity 100.0%; Pred. No. 2.5e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
    |||||
Db 17 CGAACGTTTCG 26

RESULT 64
AR408862/c
LOCUS       AR408862/c
DEFINITION  Sequence 22 from patent US 6632643.
ACCESSION  AR408862
VERSION     AR408862.1 GI:40159263
KEYWORDS   .
SOURCE     .
ORGANISM   Unknown.
            Unclassified.

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REFERENCE 1 (bases 1 to 71)
AUTHORS Yu.S., Bojsen,K., Kragh,K., Bojko,M., Nielsen,J., Marcussen,J. and Christensen,T.
TITLE Use of .alpha.-1,4-glucan lyase for preparation of 1,5-D-hydrofructose
JOURNAL Patent: US 6632643-A 22 14-OCT-2003;
FEATURES Location/Qualifiers
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/mol_type="mRNA"

ORIGIN
Query Match 100.0%; Score 10; DB 6; Length 71;
Best Local Similarity 100.0%; Pred. No. 2.5e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 26 CGAACGTTTCG 17
|||||

RESULT 65
140727
LOCUS I40727 77 bp DNA linear PAT 13-MAY-1997
DEFINITION Sequence 58 from patent US 5622828.
ACCESSION I40727
VERSION I40727.1 GI:2082207
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 77)
AUTHORS Parma,D.H. and Gold,L.
TITLE High-affinity oligonucleotide ligands to secretory phospholipase A2 (sPLA sub.2)
JOURNAL Patent: US 5622828-A 58 22-APR-1997;
FEATURES Location/Qualifiers
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Best Local Similarity 100.0%; Pred. No. 2.5e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 48 CGAACGTTTCG 57
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RESULT 66
140727/c
LOCUS I40727 77 bp DNA linear PAT 13-MAY-1997
DEFINITION Sequence 58 from patent US 5622828.
ACCESSION I40727
VERSION I40727.1 GI:2082207
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 77)
AUTHORS Parma,D.H. and Gold,L.
TITLE High-affinity oligonucleotide ligands to secretory phospholipase A2 (sPLA sub.2)
JOURNAL Patent: US 5622828-A 58 22-APR-1997;
FEATURES Location/Qualifiers
source
1..77
/organism="unknown"
/mol_type="unassigned DNA"

ORIGIN
Query Match 100.0%; Score 10; DB 6; Length 77;

Best Local Similarity 100.0%; Pred. No. 2.5e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 57 CGAACGTTTCG 48
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RESULT 67
AR526149
LOCUS AR526149 89 bp DNA linear PAT 22-SEP-2004
DEFINITION Sequence 31109 from patent US 6703491.
ACCESSION AR526149
VERSION AR526149.1 GI:52461637
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 89)
AUTHORS Homburger,S.A., Ebens,A.J. Jr., Erickson,C.S., Francis-Lang,H.L., Margolis,J.S., Reddy,B.P., Ruddy,D.A. and Buchman,A.R.
TITLE Drosophila sequences
JOURNAL Patent: US 6703491-A 31109 09-MAR-2004;
FEATURES Location/Qualifiers
source
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/organism="unknown"
/mol_type="genomic DNA"

ORIGIN
Query Match 100.0%; Score 10; DB 6; Length 89;
Best Local Similarity 100.0%; Pred. No. 2.5e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 14 CGAACGTTTCG 23
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RESULT 68
AR526149/c
LOCUS AR526149 89 bp DNA linear PAT 22-SEP-2004
DEFINITION Sequence 31109 from patent US 6703491.
ACCESSION AR526149
VERSION AR526149.1 GI:52461637
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 89)
AUTHORS Homburger,S.A., Ebens,A.J. Jr., Erickson,C.S., Francis-Lang,H.L., Margolis,J.S., Reddy,B.P., Ruddy,D.A. and Buchman,A.R.
TITLE Drosophila sequences
JOURNAL Patent: US 6703491-A 31109 09-MAR-2004;
FEATURES Location/Qualifiers
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/mol_type="genomic DNA"

ORIGIN
Query Match 100.0%; Score 10; DB 6; Length 89;
Best Local Similarity 100.0%; Pred. No. 2.5e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 23 CGAACGTTTCG 14
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RESULT 69
AX325363
LOCUS AX325363 121 bp DNA linear PAT 02-SEP-2002
DEFINITION Sequence 1501 from Patent WO0192512.
ACCESSION AX325363

VERSION AX325363.1 GI:18096119
KEYWORDS
SOURCE Ruta graveolens (common rue)
ORGANISM Ruta graveolens
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots;
rosids; eurosids II; Sapindales; Rutaceae; Ruta.
REFERENCE 1
AUTHORS Kniec, E.B., Gamber, H.B., Rice, M.C. and Kim, J.
TITLE Targeted chromosomal genomic alterations in plants using modified
single stranded oligonucleotides
JOURNAL Patent: WO 0192512-A 1501 06-DEC-2001;
UNIVERSITY OF DELAWARE (US)
FEATURES
source Location/Qualifiers
1..121
/organism="Ruta graveolens"
/mol_type="unassigned DNA"
/db_xref="taxon:37565"
ORIGIN
Query Match 100.0%; Score 10; DB 6; Length 121;
Best Local Similarity 100.0%; Pred. No. 2.5e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 CGAACGTTTCG 10
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Db 49 CGAACGTTTCG 58
RESULT 70
AX325363/c
LOCUS AX325363 121 bp DNA linear PAT 02-SEP-2002
DEFINITION Sequence 1501 from Patent WO0192512.
ACCESSION AX325363
VERSION AX325363.1 GI:18096119
KEYWORDS
SOURCE Ruta graveolens (common rue)
ORGANISM Ruta graveolens
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots;
rosids; eurosids II; Sapindales; Rutaceae; Ruta.
REFERENCE 1
AUTHORS Kniec, E.B., Gamber, H.B., Rice, M.C. and Kim, J.
TITLE Targeted chromosomal genomic alterations in plants using modified
single stranded oligonucleotides
JOURNAL Patent: WO 0192512-A 1501 06-DEC-2001;
UNIVERSITY OF DELAWARE (US)
FEATURES
source Location/Qualifiers
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/mol_type="unassigned DNA"
/db_xref="taxon:37565"
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Query Match 100.0%; Score 10; DB 6; Length 121;
Best Local Similarity 100.0%; Pred. No. 2.5e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 CGAACGTTTCG 10
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RESULT 71
AX325364
LOCUS AX325364 121 bp DNA linear PAT 02-SEP-2002
DEFINITION Sequence 1502 from Patent WO0192512.
ACCESSION AX325364
VERSION AX325364.1 GI:18096120
KEYWORDS
SOURCE Ruta graveolens (common rue)
ORGANISM Ruta graveolens
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;

Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots;
rosids; eurosids II; Sapindales; Rutaceae; Ruta.
REFERENCE 1
AUTHORS Kniec, E.B., Gamber, H.B., Rice, M.C. and Kim, J.
TITLE Targeted chromosomal genomic alterations in plants using modified
single stranded oligonucleotides
JOURNAL Patent: WO 0192512-A 1502 06-DEC-2001;
UNIVERSITY OF DELAWARE (US)
FEATURES
source Location/Qualifiers
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/mol_type="unassigned DNA"
/db_xref="taxon:37565"
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Query Match 100.0%; Score 10; DB 6; Length 121;
Best Local Similarity 100.0%; Pred. No. 2.5e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 CGAACGTTTCG 10
|||||
Db 64 CGAACGTTTCG 73
RESULT 72
AX325364/c
LOCUS AX325364 121 bp DNA linear PAT 02-SEP-2002
DEFINITION Sequence 1502 from Patent WO0192512.
ACCESSION AX325364
VERSION AX325364.1 GI:18096120
KEYWORDS
SOURCE Ruta graveolens (common rue)
ORGANISM Ruta graveolens
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots;
rosids; eurosids II; Sapindales; Rutaceae; Ruta.
REFERENCE 1
AUTHORS Kniec, E.B., Gamber, H.B., Rice, M.C. and Kim, J.
TITLE Targeted chromosomal genomic alterations in plants using modified
single stranded oligonucleotides
JOURNAL Patent: WO 0192512-A 1502 06-DEC-2001;
UNIVERSITY OF DELAWARE (US)
FEATURES
source Location/Qualifiers
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/organism="Ruta graveolens"
/mol_type="unassigned DNA"
/db_xref="taxon:37565"
ORIGIN
Query Match 100.0%; Score 10; DB 6; Length 121;
Best Local Similarity 100.0%; Pred. No. 2.5e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 CGAACGTTTCG 10
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Db 73 CGAACGTTTCG 64
RESULT 73
AX44233
LOCUS AX44233 160 bp DNA linear PAT 07-MAR-1997
DEFINITION Sequence 14 from Patent WO9510618.
ACCESSION AX44233
VERSION AX44233.1 GI:2299088
KEYWORDS
SOURCE unidentified
ORGANISM unidentified
REFERENCE 1 (bases 1 to 160)
AUTHORS Yu, S., Bojsen, K., Kragh, K.M., Bojko, M., Nielsen, J. and Marcussen, J.
TITLE USE OF -g(a)-1,4-GLUCAN LYASE FOR PREPARATION OF
1,5-D-ANHYDROFRUCTOSE ALPHA-1,4-GLUCAN LYASE FROM A FUNGUS INFECTED
ALGAE, ITS PURIFICATION, GENE CLONING AND EXPRESSION IN

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MICROORGANISMS
JOURNAL      Patent: WO 9510618-A 14 20-APR-1995;
COMMENT      DANISCO (DK)
              Other publication GB 2297090 960724
              Other publication CA 2174115 950420
              Other publication GB 2296717 960710
              Other publication AU 7937994 950504
              Other publication AU 7856394 950504.
FEATURES     Location/Qualifiers
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              1. .160
              /organism="unidentified"
              /mol_type="unassigned DNA"
              /db_xref="taxon:32644"
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Query Match      100.0%; Score 10; DB 6; Length 160;
Best Local Similarity 100.0%; Pred. No. 2.6e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1 CGAACGTTTCG 10
Db      17 CGAACGTTTCG 26

RESULT 74
LOCUS      A44233      160 bp      DNA      linear      PAT 07-MAR-1997
DEFINITION Sequence 14 from Patent WO9510618.
ACCESSION A44233
VERSION   A44233.1 GI:2299088
KEYWORDS  .
SOURCE    unidentified
           unclassified.
REFERENCE 1 (bases 1 to 160)
AUTHORS  Yu, S., Bojsen, K., Kragh, K.M., Bojko, M., Nielsen, J., and Marcussen, J.
TITLE    USE OF -G(a)-1,4-GLUCAN LYASE FOR PREPARATION OF
          1,5-D-ANHYDROFRUCTOSE ALPHA-1,4-GLUCAN LYASE FROM A FUNGUS INFECTED
          ALGAE, ITS PURIFICATION, GENE CLONING AND EXPRESSION IN
          MICROORGANISMS
JOURNAL   Patent: WO 9510618-A 14 20-APR-1995;
COMMENT   DANISCO (DK)
           Other publication GB 2297090 960724
           Other publication CA 2174115 950420
           Other publication GB 2296717 960710
           Other publication AU 7937994 950504
           Other publication AU 7856394 950504.
FEATURES  Location/Qualifiers
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Query Match      100.0%; Score 10; DB 6; Length 160;
Best Local Similarity 100.0%; Pred. No. 2.6e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1 CGAACGTTTCG 10
Db      17 CGAACGTTTCG 26

RESULT 75
LOCUS      A72730      160 bp      DNA      linear      PAT 15-OCT-1999
DEFINITION Sequence 24 from Patent WO9510616.
ACCESSION A72730
VERSION   A72730.1 GI:6063803
KEYWORDS  .
SOURCE    unidentified
           unclassified.
REFERENCE 1 (bases 1 to 160)
AUTHORS  Yu, S., Bojsen, K., Kragh, K., Bojko, M., Nielsen, J., Marcussen, J., and
          Christensen, T.
TITLE    Use of alpha-1,4-glucan lyase for preparation of
          1,5-D-hydrofructose
          Patent: US 6632643-A 24 14-OCT-2003;
JOURNAL   Location/Qualifiers
FEATURES  source
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           /organism="unknown"

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REFERENCE 1 (bases 1 to 160)
AUTHORS  Yu, S. and Bojsen, K.
TITLE    USE OF ALPHA -1,4-GLUCAN LYASE FOR PREPARATION OF
          1,5-D-ANHYDROFRUCTOSE
          Patent: WO 9510616-A 24 20-APR-1995;
JOURNAL   DANISCO (DK); YU SHUKUN (SE)
FEATURES  Location/Qualifiers
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Best Local Similarity 100.0%; Pred. No. 2.6e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1 CGAACGTTTCG 10
Db      17 CGAACGTTTCG 26

RESULT 76
LOCUS      A72730      160 bp      DNA      linear      PAT 15-OCT-1999
DEFINITION Sequence 24 from Patent WO9510616.
ACCESSION A72730
VERSION   A72730.1 GI:6063803
KEYWORDS  .
SOURCE    unidentified
           unclassified.
REFERENCE 1 (bases 1 to 160)
AUTHORS  Yu, S. and Bojsen, K.
TITLE    USE OF ALPHA -1,4-GLUCAN LYASE FOR PREPARATION OF
          1,5-D-ANHYDROFRUCTOSE
          Patent: WO 9510616-A 24 20-APR-1995;
JOURNAL   DANISCO (DK); YU SHUKUN (SE)
FEATURES  Location/Qualifiers
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           /mol_type="unassigned DNA"
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Best Local Similarity 100.0%; Pred. No. 2.6e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1 CGAACGTTTCG 10
Db      26 CGAACGTTTCG 17

RESULT 77
LOCUS      AB408863      160 bp      mRNA      linear      PAT 18-DEC-2003
DEFINITION Sequence 24 from patent US 6632643.
ACCESSION AB408863
VERSION   AB408863.1 GI:40159264
KEYWORDS  .
SOURCE    Unknown.
ORGANISM  Unclassified.
REFERENCE 1 (bases 1 to 160)
AUTHORS  Yu, S., Bojsen, K., Kragh, K., Bojko, M., Nielsen, J., Marcussen, J., and
          Christensen, T.
TITLE    Use of alpha-1,4-glucan lyase for preparation of
          1,5-D-hydrofructose
          Patent: US 6632643-A 24 14-OCT-2003;
JOURNAL   Location/Qualifiers
FEATURES  source
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           /organism="unknown"

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/mol_type="mRNA"

ORIGIN

Query Match 100.0%; Score 10; DB 6; Length 160;
 Best Local Similarity 100.0%; Pred. No. 2.6e+04;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
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 Db 17 CGAACGTTTCG 26

RESULT 78

AR408863/c
 LOCUS AR408863 160 bp mRNA linear PAT 18-DEC-2003
 DEFINITION Sequence 24 from patent US 6632643.
 ACCESSION AR408863
 VERSION AR408863.1 GI:40159264
 KEYWORDS Unknown.
 SOURCE Unknown.

ORGANISM

Unclassified.
 1 (bases 1 to 160)
 Yu, S., Bojlsen, K., Kragh, K., Bojko, M., Nielsen, J., Marcussen, J. and Christensen, T.
 TITLE Use of alpha-1,4-glucan lyase for preparation of
 1,5-D-hydrofructose

JOURNAL Patent: US 6632643-A 24 14-OCT-2003;

FEATURES

source
 Location/Qualifiers
 1..160
 /organism="unknown"
 /mol_type="mRNA"

ORIGIN

Query Match 100.0%; Score 10; DB 6; Length 160;
 Best Local Similarity 100.0%; Pred. No. 2.6e+04;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
 |||||
 Db 26 CGAACGTTTCG 17

RESULT 79

S77483
 LOCUS S77483 206 bp mRNA linear ROD 25-AUG-1995
 DEFINITION growth hormone receptor/growth hormone-binding protein {5' region, variant transcript V1} [rats, liver, mRNA Partial, 206 nt].

ACCESSION S77483

VERSION S77483.1 GI:957220

KEYWORDS

SOURCE

Rattus sp.
 Rattus sp.
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae;
 Rattus.

REFERENCE

1 (bases 1 to 206)
 Domene, H.M., Cassorla, F., Werner, H., Roberts, C.T. Jr. and Leroith, D.

TITLE Rat growth hormone receptor/growth hormone-binding protein mRNAs with divergent 5'-untranslated regions are expressed in a tissue-specific manner

JOURNAL DNA Cell Biol. 14 (3), 195-204 (1995)

MEDLINE

PUBMED

REMARK

GenBank staff at the National Library of Medicine created this entry [NCBI gibbsq 165589] from the original journal article.

FEATURES

source
 Location/Qualifiers
 1..206
 /organism="Rattus sp."
 /mol_type="mRNA"
 /db_xref="taxon:10118"
 1..206

gene

/gene="growth hormone receptor/growth hormone-binding protein"

ORIGIN

Query Match 100.0%; Score 10; DB 10; Length 206;
 Best Local Similarity 100.0%; Pred. No. 2.6e+04;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
 |||||
 Db 177 CGAACGTTTCG 186

RESULT 80

S77483/c
 LOCUS S77483 206 bp mRNA linear ROD 25-AUG-1995
 DEFINITION growth hormone receptor/growth hormone-binding protein {5' region, variant transcript V1} [rats, liver, mRNA Partial, 206 nt].

ACCESSION S77483

VERSION S77483.1 GI:957220

KEYWORDS

SOURCE

Rattus sp.
 Rattus sp.
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae;
 Rattus.

REFERENCE

1 (bases 1 to 206)
 Domene, H.M., Cassorla, F., Werner, H., Roberts, C.T. Jr. and Leroith, D.

TITLE Rat growth hormone receptor/growth hormone-binding protein mRNAs with divergent 5'-untranslated regions are expressed in a tissue-specific manner

JOURNAL DNA Cell Biol. 14 (3), 195-204 (1995)

MEDLINE

PUBMED

REMARK

GenBank staff at the National Library of Medicine created this entry [NCBI gibbsq 165589] from the original journal article.

FEATURES

source

Location/Qualifiers
 1..206
 /organism="Rattus sp."
 /mol_type="mRNA"
 /db_xref="taxon:10118"
 1..206

gene

/gene="growth hormone receptor/growth hormone-binding protein"

ORIGIN

Query Match 100.0%; Score 10; DB 10; Length 206;
 Best Local Similarity 100.0%; Pred. No. 2.6e+04;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 CGAACGTTTCG 10
 |||||
 Db 186 CGAACGTTTCG 177

RESULT 81

AF386445
 LOCUS AF386445 222 bp DNA linear PRI 02-JUN-2002
 DEFINITION Homo sapiens clone BF3N3-K3-G3/A27-1-P immunoglobulin kappa light chain variable region gene, partial cds.

ACCESSION AF386445

VERSION AF386445.1 GI:21311067

KEYWORDS

SOURCE

Homo sapiens (human)
 Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE

1 (bases 1 to 222)
 Monson, N.L. and Lipsky, P.E.

TITLE The Role of CD40-CD40 Ligand (CD154) Interactions in Immunoglobulin Light Chain Repertoire Generation and Somatic Mutation
 JOURNAL Unpublished

```

REFERENCE 2 (bases 1 to 222)
AUTHORS Monson,N.I. and Lipsky,P.E.
TITLE Direct Submission
JOURNAL Submitted (29-MAY-2001) Neurology, University of Texas Southwestern
Medical Center, 5323 Harry Hines Blvd, Dallas, TX 75390, USA
FEATURES
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      1..222
        /organism="Homo sapiens"
        /mol_type="genomic DNA"
        /db_xref="taxon:9606"
        /clone="BFJN3-K3-G3/A27-1-P"
        /rearranged
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        region"
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        region"
        /protein_id="AA046533.1"
        /db_xref="GI:21311068"
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ORIGIN
Query Match 100.0%; Score 10; DB 9; Length 222;
Best Local Similarity 100.0%; Pred. No. 2.6e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
    |||||
Db 211 CGAACGTTTCG 220

RESULT 82
LOCUS AF386445 222 bp DNA linear PRI 02-JUN-2002
DEFINITION Homo sapiens clone BFJN3-K3-G3/A27-1-P immunoglobulin kappa light
chain variable region gene, partial cds.
ACCESSION AF386445
VERSION AF386445.1 GI:21311067
KEYWORDS
SOURCE Homo sapiens (human)
ORGANISM
  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
  Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE
  1 (bases 1 to 222)
AUTHORS Monson,N.I. and Lipsky,P.E.
TITLE The Role of CD40-CD40 Ligand (CD154) Interactions in Immunoglobulin
Light Chain Repertoire Generation and Somatic Mutation
JOURNAL Unpublished
REFERENCE 2 (bases 1 to 222)
AUTHORS Monson,N.I. and Lipsky,P.E.
TITLE Direct Submission
JOURNAL Submitted (29-MAY-2001) Neurology, University of Texas Southwestern
Medical Center, 5323 Harry Hines Blvd, Dallas, TX 75390, USA
FEATURES
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mRNA
CDS

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Query Match 100.0%; Score 10; DB 9; Length 222;
Best Local Similarity 100.0%; Pred. No. 2.6e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
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Db 220 CGAACGTTTCG 211

RESULT 83
LOCUS HSU07521 240 bp mRNA linear PRI 14-APR-1994
DEFINITION Human clone Z20 immunoglobulin kappa chain (IGK) mRNA, VKIII-JK1
region, partial cds.
ACCESSION U07521
VERSION U07521.1 GI:470577
KEYWORDS
SOURCE Homo sapiens (human)
ORGANISM
  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
  Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE
  1 (bases 1 to 240)
AUTHORS Pasquali,J.
TITLE Evidence that the VKIII gene usage is non stochastic in both adult
and newborn peripheral B cells and that peripheral CD5+ adult B
cells are oligoclonal
JOURNAL J. Clin. Invest. (1994) In press
REFERENCE 2 (bases 1 to 240)
AUTHORS Pasquali,J.
TITLE Direct Submission
JOURNAL Submitted (07-MAR-1994) Jean-Louis Pasquali, Laboratoire
d'Immunopathologie, Centre de Recherche d'Immunohematologie,
Hopital Central, Hopitaux Universitaires, Strasbourg 67091, France
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        /clone="Z20"
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        /cell_type="lymphocyte B cell"
        /dev_stage="newborn"
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      13..45
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      91..111
        /misc_feature
      208..234
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      230..231
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        /misc_feature
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      /note="J kappaal region"

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Query Match 100.0%; Score 10; DB 9; Length 240;
Best Local Similarity 100.0%; Pred. No. 2.6e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
    |||||
Db 229 CGAACGTTTCG 238

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RESULT 84
HSU07521/c
LOCUS      240 bp      mRNA      linear      PRI 14-APR-1994
DEFINITION Human clone Z20 immunoglobulin kappa chain (IgK) mRNA, VKIII-JK1
ACCESSION  U07521
VERSION     U07521.1  GI:470577
KEYWORDS
SOURCE      Homo sapiens (human)
ORGANISM    Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1 (bases 1 to 240)
AUTHORS    Pasquali,J.
TITLE      Evidence that the VKIII gene usage is non stochastic in both adult
            and newborn peripheral B cells and that peripheral CD5+ adult B
            cells are oligoclonal
JOURNAL    J. Clin. Invest. (1994) In press
REFERENCE   2 (bases 1 to 240)
AUTHORS    Pasquali,J.
TITLE      Direct Submission
JOURNAL    Submitted (07-MAR-1994) Jean-Louis Pasquali, Laboratoire
            d'Immunopathologie, Centre de Recherche d'Immunohematologie,
            Hopital Central, Hopitaux Universitaires, Strasbourg 67091, France
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            misc_feature    208..234
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            misc_feature    230..231
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Query Match      100.0%; Score 10; DB 9; Length 240;
Best Local Similarity 100.0%; Pred. No. 2.6e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1  CGAACGTTTCG 10
        |||||
Db      238  CGAACGTTTCG 229

RESULT 85
HSA298488
LOCUS      241 bp      DNA      linear      PRI 01-AUG-2000
DEFINITION Homo sapiens partial IGKVL2 gene for immunoglobulin kappa chain
            variable region, patient 1, small EBER+ cell isolate 2.43.
ACCESSION  AJ298488
VERSION     AJ298488.1  GI:9663253
KEYWORDS    IGKVL2 gene; immunoglobulin kappa chain; variable region.
SOURCE      Homo sapiens (human)
ORGANISM    Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
AUTHORS    Spieker,T., Kurth,J., Kueppers,R., Rajewsky,K., Braeuninger,A. and
            Hansmann,M.L.
TITLE      Molecular single cell analysis of the clonal relationship of small
            Epstein-Barr virus infected cells and Epstein-Barr virus harboring
            Hodgkin and Reed/Sternberg cells in Hodgkin's disease
JOURNAL    Unpublished
REFERENCE   2 (bases 1 to 241)
AUTHORS    Spieker,T.
TITLE      Direct Submission
JOURNAL    Submitted (26-APR-2000) Spieker T., Pathology, University-Clinic,
            Theodor-Stern-Kai 7, 60590 Frankfurt, GERMANY
FEATURES   Location/Qualifiers
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                        /cell_type="small EBER+ cell isolate 2.43"
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ORIGIN
Query Match      100.0%; Score 10; DB 9; Length 241;
Best Local Similarity 100.0%; Pred. No. 2.6e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1  CGAACGTTTCG 10
        |||||
Db      232  CGAACGTTTCG 241

RESULT 86
HSA298488/c
LOCUS      241 bp      DNA      linear      PRI 01-AUG-2000
DEFINITION Homo sapiens partial IGKVL2 gene for immunoglobulin kappa chain
            variable region, patient 1, small EBER+ cell isolate 2.43.
ACCESSION  AJ298488
VERSION     AJ298488.1  GI:9663253
KEYWORDS    IGKVL2 gene; immunoglobulin kappa chain; variable region.
SOURCE      Homo sapiens (human)
ORGANISM    Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
AUTHORS    Spieker,T., Kurth,J., Kueppers,R., Rajewsky,K., Braeuninger,A. and
            Hansmann,M.L.
TITLE      Molecular single cell analysis of the clonal relationship of small
            Epstein-Barr virus infected cells and Epstein-Barr virus harboring
            Hodgkin and Reed/Sternberg cells in Hodgkin's disease
JOURNAL    Unpublished
REFERENCE   2 (bases 1 to 241)
AUTHORS    Spieker,T.
TITLE      Direct Submission
JOURNAL    Submitted (26-APR-2000) Spieker T., Pathology, University-Clinic,
            Theodor-Stern-Kai 7, 60590 Frankfurt, GERMANY
FEATURES   Location/Qualifiers
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                        /organism="Homo sapiens"

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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
AUTHORS    Spieker,T., Kurth,J., Kueppers,R., Rajewsky,K., Braeuninger,A. and
            Hansmann,M.L.
TITLE      Molecular single cell analysis of the clonal relationship of small
            Epstein-Barr virus infected cells and Epstein-Barr virus harboring
            Hodgkin and Reed/Sternberg cells in Hodgkin's disease
JOURNAL    Unpublished
REFERENCE   2 (bases 1 to 241)
AUTHORS    Spieker,T.
TITLE      Direct Submission
JOURNAL    Submitted (26-APR-2000) Spieker T., Pathology, University-Clinic,
            Theodor-Stern-Kai 7, 60590 Frankfurt, GERMANY
FEATURES   Location/Qualifiers
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                        /isolate="patient 1"
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            CDS             <1..>241
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                        FSGSGGTFTSLTSLSQSEDFAVYCYQQYDNWRTF"
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                        /product="immunoglobulin kappa chain variable region"
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Query Match      100.0%; Score 10; DB 9; Length 241;
Best Local Similarity 100.0%; Pred. No. 2.6e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1  CGAACGTTTCG 10
        |||||
Db      232  CGAACGTTTCG 241

RESULT 86
HSA298488/c
LOCUS      241 bp      DNA      linear      PRI 01-AUG-2000
DEFINITION Homo sapiens partial IGKVL2 gene for immunoglobulin kappa chain
            variable region, patient 1, small EBER+ cell isolate 2.43.
ACCESSION  AJ298488
VERSION     AJ298488.1  GI:9663253
KEYWORDS    IGKVL2 gene; immunoglobulin kappa chain; variable region.
SOURCE      Homo sapiens (human)
ORGANISM    Homo sapiens
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
            Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
AUTHORS    Spieker,T., Kurth,J., Kueppers,R., Rajewsky,K., Braeuninger,A. and
            Hansmann,M.L.
TITLE      Molecular single cell analysis of the clonal relationship of small
            Epstein-Barr virus infected cells and Epstein-Barr virus harboring
            Hodgkin and Reed/Sternberg cells in Hodgkin's disease
JOURNAL    Unpublished
REFERENCE   2 (bases 1 to 241)
AUTHORS    Spieker,T.
TITLE      Direct Submission
JOURNAL    Submitted (26-APR-2000) Spieker T., Pathology, University-Clinic,
            Theodor-Stern-Kai 7, 60590 Frankfurt, GERMANY
FEATURES   Location/Qualifiers
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/cell type="small EBER+ cell isolate 2.43"
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/protein_id="CAC01171.1"
/db xref="GI:9663254"
/translation="RATLSKRSQSISNLAWYQKQCPAPRLLIYASTRVTCIPVR
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/product="immunoglobulin kappa chain variable region"

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Query Match 100.0%; Score 10; DB 9; Length 241;
Best Local Similarity 100.0%; Pred. No. 2.6e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 241 CGAACGTTTCG 232

RESULT 87
HSA415205 241 bp DNA linear PRI 12-OCT-2001
LOCUS Homo sapiens partial IGVBK3 gene for immunoglobulin kappa chain
DEFINITION variable region, donor BJ, cell148.
ACCESSION AJ415205
VERSION AJ415205.1 GI:16076118
KEYWORDS IGKV gene; immunoglobulin kappa chain; variable region.
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
REFERENCE 1
AUTHORS Goossens,T., Brauning,A., Klein,U., Kuppers,R. and Rajewsky,K.
TITLE Receptor revision plays no major role in shaping the receptor
JOURNAL repertoire of human memory B cells after the onset of somatic
AUTHORS hypermutation
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE 2 (bases 1 to 241)
JOURNAL Eur. J. Immunol.
AUTHORS Brauning,A.
TITLE Direct Submission
JOURNAL Submitted (21-SEP-2001) Brauning A., Pathology, University of
Frankfurt, Theodor Stern Kai 7, 60590, GERMANY
FEATURES
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ORIGIN /product="immunoglobulin kappa chain variable region"
Query Match 100.0%; Score 10; DB 9; Length 241;
Best Local Similarity 100.0%; Pred. No. 2.6e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
Db 241 CGAACGTTTCG 232

RESULT 89
HSA415198 245 bp DNA linear PRI 12-OCT-2001
LOCUS Homo sapiens partial IGVL6 gene for immunoglobulin kappa chain
DEFINITION variable region, donor BJ, cell121.
ACCESSION AJ415198
VERSION AJ415198.1 GI:16076111
KEYWORDS IGKV gene; immunoglobulin kappa chain; variable region.
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
REFERENCE 1
AUTHORS Goossens,T., Brauning,A., Klein,U., Kuppers,R. and Rajewsky,K.
TITLE Receptor revision plays no major role in shaping the receptor
JOURNAL repertoire of human memory B cells after the onset of somatic
AUTHORS hypermutation
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE 2 (bases 1 to 245)
JOURNAL Eur. J. Immunol.

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AUTHORS      Brauning,A.
TITLE        Direct Submission
JOURNAL      Submitted (21-SEP-2001) Brauning A., Pathology, University of
              Frankfurt, Theodor Stern Kai 7, 60590, GERMANY
FEATURES
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      /product="immunoglobulin kappa chain variable region"
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Query Match      100.0%; Score 10; DB 9; Length 245;
Best Local Similarity 100.0%; Pred. No. 2.6e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1 CGAACGTTTCG 10
Db      236 CGAACGTTTCG 245

RESULT 90
HSA415198/c
LOCUS      HSA415198      245 bp      DNA      linear      PRI 12-OCT-2001
DEFINITION Homo sapiens partial IGVKL6 gene for immunoglobulin kappa chain
              variable region, donor BJ, cell121.
ACCESSION      AJ415198
VERSION      AJ415198.1 GI:16076111
KEYWORDS      IGKV gene; immunoglobulin kappa chain; variable region.
SOURCE      Homo sapiens (human)
ORGANISM      Homo sapiens
              Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
              Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE      1
AUTHORS      Goossens,T., Brauning,A., Klein,U., Koppers,R. and Rajewsky,K.
TITLE        Receptor revision plays no major role in shaping the receptor
              repertoire of human memory B cells after the onset of somatic
              hypermutation
JOURNAL      Eur. J. Immunol.
REFERENCE      2 (bases 1 to 245)
AUTHORS      Brauning,A.
TITLE        Direct Submission
JOURNAL      Submitted (21-SEP-2001) Brauning A., Pathology, University of
              Frankfurt, Theodor Stern Kai 7, 60590, GERMANY
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Best Local Similarity 100.0%; Pred. No. 2.6e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1 CGAACGTTTCG 10
Db      236 CGAACGTTTCG 245

RESULT 90
HSA415198/c
LOCUS      HSA415198      245 bp      DNA      linear      PRI 12-OCT-2001
DEFINITION Homo sapiens partial IGVKL6 gene for immunoglobulin kappa chain
              variable region, donor BJ, cell121.
ACCESSION      AJ415198
VERSION      AJ415198.1 GI:16076111
KEYWORDS      IGKV gene; immunoglobulin kappa chain; variable region.
SOURCE      Homo sapiens (human)
ORGANISM      Homo sapiens
              Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
              Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE      1
AUTHORS      Goossens,T., Brauning,A., Klein,U., Koppers,R. and Rajewsky,K.
TITLE        Receptor revision plays no major role in shaping the receptor
              repertoire of human memory B cells after the onset of somatic
              hypermutation
JOURNAL      Eur. J. Immunol.
REFERENCE      2 (bases 1 to 245)
AUTHORS      Brauning,A.
TITLE        Direct Submission
JOURNAL      Submitted (21-SEP-2001) Brauning A., Pathology, University of
              Frankfurt, Theodor Stern Kai 7, 60590, GERMANY
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      /product="immunoglobulin kappa chain variable region"
ORIGIN
Query Match      100.0%; Score 10; DB 9; Length 245;
Best Local Similarity 100.0%; Pred. No. 2.6e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Qy      1 CGAACGTTTCG 10
Db      245 CGAACGTTTCG 236

RESULT 91
HSA415191
LOCUS      HSA415191      247 bp      DNA      linear      PRI 12-OCT-2001
DEFINITION Homo sapiens partial IGVKAL7 gene for immunoglobulin kappa chain
              variable region, donor BJ, cell152.
ACCESSION      AJ415191
VERSION      AJ415191.1 GI:16076104
KEYWORDS      IGKV gene; immunoglobulin kappa chain; variable region.
SOURCE      Homo sapiens (human)
ORGANISM      Homo sapiens
              Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
              Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE      1
AUTHORS      Goossens,T., Brauning,A., Klein,U., Koppers,R. and Rajewsky,K.
TITLE        Receptor revision plays no major role in shaping the receptor
              repertoire of human memory B cells after the onset of somatic
              hypermutation
JOURNAL      Eur. J. Immunol.
REFERENCE      2 (bases 1 to 247)
AUTHORS      Brauning,A.
TITLE        Direct Submission
JOURNAL      Submitted (21-SEP-2001) Brauning A., Pathology, University of
              Frankfurt, Theodor Stern Kai 7, 60590, GERMANY
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Best Local Similarity 100.0%; Pred. No. 2.6e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy      1 CGAACGTTTCG 10
Db      238 CGAACGTTTCG 247

RESULT 92
HSA415191/c
LOCUS      HSA415191      247 bp      DNA      linear      PRI 12-OCT-2001
DEFINITION Homo sapiens partial IGVKAL7 gene for immunoglobulin kappa chain
              variable region, donor BJ, cell152.
ACCESSION      AJ415191
VERSION      AJ415191.1 GI:16076104
KEYWORDS      IGKV gene; immunoglobulin kappa chain; variable region.
SOURCE      Homo sapiens (human)
ORGANISM      Homo sapiens
              Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
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REFERENCE      1
AUTHORS      Goossens,T., Brauning,A., Klein,U., Koppers,R. and Rajewsky,K.
TITLE        Receptor revision plays no major role in shaping the receptor
              repertoire of human memory B cells after the onset of somatic
              hypermutation
JOURNAL      Eur. J. Immunol.

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REFERENCE 2 (bases 1 to 247)
AUTHORS Brauning, A.
TITLE Direct Submission
JOURNAL Submitted (21-SEP-2001) Brauning, A., Pathology, University of
Frankfurt, Theodor Stern Kai 7, 60590, GERMANY
FEATURES
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gene
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V_region
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Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 CGAACGTTTCG 10
Db 247 CGAACGTTTCG 238
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Hs165A6F 249 bp DNA linear PRI 18-OCT-1995
H.sapiens CpG island DNA genomic MseI fragment, clone 165a6,
forward read cp9165a6.ft1a.
ACCESSION 257132
VERSION 257132.1 GI:1028363
KEYWORDS CpG island; genomic MseI fragment.
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE 1
AUTHORS Cross, S.H., Charlton, J.A., Nan, X. and Bird, A.P.
TITLE Purification of CpG islands using a methylated DNA binding column
JOURNAL Nat. Genet. 6 (3), 236-244 (1994)
MEDLINE 94282070
PUBMED 8012384
REFERENCE 2 (bases 1 to 249)
AUTHORS Dodsworth, S.J., Huckle, E., Wilkinson, P. and Micklem, G.
TITLE Direct Submission
JOURNAL Submitted (16-OCT-1995) The Sanger Centre, Hinxton, Cambridgeshire,
CB10 1RQ, England. E-mail contact: humquery@sanger.ac.uk
COMMENT Clones are available from the UK MRC Human Genome Mapping Project
Resource Centre, Hinxton, Cambridgeshire CB10 1RQ, UK. See URL:
http://www.hgmp.mrc.ac.uk/ for details
or contact: bihelp@hgmp.mrc.ac.uk.
FEATURES
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            /db_xref="taxon:9606"
            /clone="165a6"
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Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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Db 55 CGAACGTTTCG 46
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Hs285551 249 bp DNA linear PRI 01-APR-1997
H.sapiens BF2N2-Kg3-C08.Gene L2 for immunoglobulin kappa chain
variable region.
ACCESSION Z85551
VERSION Z85551.1 GI:1922475
KEYWORDS immunoglobulin; immunoglobulin kappa chain; joining region;
variable region.
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE 1
AUTHORS Foster, S.J.
JOURNAL Unpublished
REFERENCE 2 (bases 1 to 249)

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AUTHORS Foster, S.J.
 TITLE Direct Submission
 JOURNAL Submitted (06-FEB-1997) Foster S.J., Department of Internal Medicine, Harold C. Simmons Arthritis Research Center, University of Texas Southwestern Medical Center, 5323 Harry Hines Blvd., Dallas, TX 75235-8884, USA

FEATURES
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 /db_xref="taxon:9606"
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 /cell_type="CD5(-) IgM(+) B lymphocyte"
 /tissue_type="blood"
 /rearranged
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 /gene="BF2N2-Kg3-C08"
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 /note="Vk3 family, L2"

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 Best Local Similarity 100.0%; Pred. No. 2.6e+04;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
 |||||
 Db 226 CGAACGTTTCG 235

RESULT 96
 LOCUS HS285551/c 249 bp DNA linear PRI 01-APR-1997
 DEFINITION H.sapiens BF2N2-Kg3-C08 gene L2 for immunoglobulin kappa chain variable region.
 ACCESSION Z85551
 VERSION Z85551.1 GI:1922475
 KEYWORDS immunoglobulin; immunoglobulin kappa chain; joining region; variable region.
 SOURCE Homo sapiens (human)
 ORGANISM Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE
 1 Foster, S.J.
 AUTHORS Unpublished
 JOURNAL Unpublished
 REFERENCE 2 (bases 1 to 249)
 AUTHORS Foster, S.J.
 TITLE Direct Submission
 JOURNAL Submitted (06-FEB-1997) Foster S.J., Department of Internal Medicine, Harold C. Simmons Arthritis Research Center, University of Texas Southwestern Medical Center, 5323 Harry Hines Blvd., Dallas, TX 75235-8884, USA

FEATURES
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 /chromosome="2"
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 /tissue_type="blood"
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ORIGIN
 Query Match 100.0%; Score 10; DB 9; Length 249;
 Best Local Similarity 100.0%; Pred. No. 2.6e+04;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
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 Db 226 CGAACGTTTCG 235

Query Match 100.0%; Score 10; DB 9; Length 249;
 Best Local Similarity 100.0%; Pred. No. 2.6e+04;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTCG 10
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 Db 235 CGAACGTTTCG 226

RESULT 97
 LOCUS HSA347589 250 bp DNA linear PRI 20-SEP-2001
 DEFINITION Homo sapiens partial IGKKA30 gene for immunoglobulin kappa chain variable region, isolate case3-cell129.
 ACCESSION AJ347589
 VERSION AJ347589.1 GI:15722836
 KEYWORDS Igk gene; immunoglobulin kappa chain; variable region.
 SOURCE Homo sapiens (human)
 ORGANISM Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE
 1 Braeuninger, A., Spieker, T., Willenbrock, K., Gaulard, P., Wacker, H.H., Rajewsky, K., Hansmann, M.L. and Kueppers, R. Survival and clonal expansion of mutating 'forbidden' (immunoglobulin receptor-deficient) Epstein-Barr virus-infected B cells in angioimmunoblastic T cell lymphoma Unpublished
 REFERENCE 2 (bases 1 to 250)
 AUTHORS Braeuninger, A.
 TITLE Direct Submission
 JOURNAL Submitted (20-AUG-2001) Braeuninger A., Pathology, University of Frankfurt, Theodor-Stern-Kai 7, 60590, GERMANY

FEATURES
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RESULT 98
 LOCUS HSA347589/c 250 bp DNA linear PRI 20-SEP-2001
 DEFINITION Homo sapiens partial IGKKA30 gene for immunoglobulin kappa chain variable region, isolate case3-cell129.
 ACCESSION AJ347589
 VERSION AJ347589.1 GI:15722836
 KEYWORDS Igk gene; immunoglobulin kappa chain; variable region.

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SOURCE      Homo sapiens (human)
ORGANISM    Homo sapiens
REFERENCE   Eukaryota; Chordata; Craniata; Vertebrata; Euteleostomi;
AUTHORS    Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1
AUTHORS    Braeuning, A., Spicker, T., Willenbrock, K., Gaulard, P.,
TITLE       Wacker, H.H., Rajewsky, K., Hansmann, M.L. and Kueppers, R.
            Survival and clonal expansion of mutating 'forbidden'
            (immunoglobulin receptor-deficient) Epstein-Barr virus-infected B
            cells in angioimmunoblastic T cell lymphoma
JOURNAL     Unpublished
AUTHORS     2 (bases 1 to 250)
REFERENCE   Braeuning, A.
TITLE       Direct Submission
JOURNAL     Submitted (20-AUG-2001) Braeuning A., Pathology, University of
            Frankfurt, Theodor-Stern-Kai 7, 60590, GERMANY
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ORIGIN
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Best Local Similarity 100.0%; Pred. No. 2.6e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTC 10
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Db 250 CGAACGTTTC 241

RESULT 99
AF303897
LOCUS      AF303897 Homo sapiens immunoglobulin kappa chain gene, partial cds.
DEFINITION Homo sapiens immunoglobulin kappa chain gene, partial cds.
ACCESSION  AF303897
VERSION     AF303897.1 GI:11275921
KEYWORDS
SOURCE      Homo sapiens (human)
ORGANISM    Homo sapiens
REFERENCE   Eukaryota; Chordata; Craniata; Vertebrata; Euteleostomi;
AUTHORS    Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1 (bases 1 to 254)
AUTHORS    De Re.V., De Vita, S., Marzotto, A., Gloghini, A., Pivetta, B.,
TITLE       Gasparotto, D., Cannizzaro, R., Carbone, A. and Boiocchi, M.
            Pre-malignant and malignant lymphoproliferations in an HCV-infected
            type II mixed cryoglobulinemic patient are sequential phases of an
            antigen-driven pathological process
JOURNAL     Int. J. Cancer 87 (2), 211-216 (2000)
MEDLINE     20320827
PUBMED      10861476
REFERENCE   2 (bases 1 to 254)
AUTHORS    De Re.V., De Vita, S. and Marzotto, A.
TITLE       Sequence analysis of the immunoglobulin antigen receptor of
            hepatitis C virus-associated non Hodgkin's lymphomas suggests that
            the malignant cells are derived from the rheumatoid factor
            producing cells that occur mainly in type II cryoglobulinemia

JOURNAL     Blood (2001) In press
AUTHORS     3 (bases 1 to 254)
REFERENCE   De Re.V., De Vita, S. and Marzotto, A.
TITLE       Direct Submission
JOURNAL     Submitted (01-SEP-2000) OSI, CRO, IRCCS, Pedemontana Occidentale
            12, Aviano, PN 33081, Italy
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Best Local Similarity 100.0%; Pred. No. 2.6e+04;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 CGAACGTTTC 10
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Db 216 CGAACGTTTC 225

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DEFINITION Homo sapiens immunoglobulin kappa chain gene, partial cds.
ACCESSION  AF303897
VERSION     AF303897.1 GI:11275921
KEYWORDS
SOURCE      Homo sapiens (human)
ORGANISM    Homo sapiens
REFERENCE   Eukaryota; Chordata; Craniata; Vertebrata; Euteleostomi;
AUTHORS    Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE   1 (bases 1 to 254)
AUTHORS    De Re.V., De Vita, S., Marzotto, A., Gloghini, A., Pivetta, B.,
TITLE       Gasparotto, D., Cannizzaro, R., Carbone, A. and Boiocchi, M.
            Pre-malignant and malignant lymphoproliferations in an HCV-infected
            type II mixed cryoglobulinemic patient are sequential phases of an
            antigen-driven pathological process
JOURNAL     Int. J. Cancer 87 (2), 211-216 (2000)
MEDLINE     20320827
PUBMED      10861476
REFERENCE   2 (bases 1 to 254)
AUTHORS    De Re.V., De Vita, S. and Marzotto, A.
TITLE       Sequence analysis of the immunoglobulin antigen receptor of
            hepatitis C virus-associated non Hodgkin's lymphomas suggests that
            the malignant cells are derived from the rheumatoid factor
            producing cells that occur mainly in type II cryoglobulinemia

JOURNAL     Blood (2001) In press
AUTHORS     3 (bases 1 to 254)
REFERENCE   De Re.V., De Vita, S. and Marzotto, A.
TITLE       Direct Submission
JOURNAL     Submitted (01-SEP-2000) OSI, CRO, IRCCS, Pedemontana Occidentale
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FEATURES   Location/Qualifiers
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